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## THE CONJUGATION OF PERSONALITY.<sup>1</sup>

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THIS paper is, in the main, an essay in description. Its object is to survey the various ways in which the person is presented in immediate experience, so as to give a full and systematic account of what "person" means in ordinary discourse. But, like all philosophical incursions into psychology, it has its ulterior motive. It proposes to insinuate that the importance of description has, in recent psychology, been seriously underestimated. Any analytic or genetic inquiry must begin with the fact which it is intended to analyse, and the origins of which it is intended to investigate. If the fact is inadequately surveyed, any inquiry into its constitution and antecedents will be to that extent prejudiced. It will be urged that recent psychologists, though they hold diverse and decided views as to what a person is made up of, or how he came to be what he is, are by no means so clear as to what it is that he is. Perhaps this is why they sometimes conclude that he is not what he is, but only what he is made up of or came out of. At any rate, they seem to require a broader base for their operations than that from which they commonly proceed; and it is an incidental object of this paper to try to supply it. For the most part, however, what follows will be straightforwardly descriptive, and innocent of philosophic guile.

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<sup>1</sup> The title of this paper is a grammatical solecism, as according to grammar only verbs can be conjugated, and not nouns. But it has been retained, on the ground that grammar, in its definition of nouns, is under the influence of an archaic conception of substance. A person is really not a substance with varying accidents, but an active process passing through varying phases. Now what distinguishes a verb is that it denotes a doing. A noun, therefore, which denotes a doing has a certain verbal character, and can by transference be regarded as susceptible of conjugation.

The framework on which it is proposed to hang the description is borrowed from the grammatical conjugation of the verb. As is well known, in several of its moods, a verb may be in the first, second, or third person, singular or plural: and the changes in the form of the verb may be reinforced by the use of distinctive personal pronouns. There is no pretence that the persons of the conjugated verb are absolutely exhaustive, but the study of comparative philology shows them to be remarkably uniform, and language is a good clue to average human experience. There is, therefore, at least a fair presumption that "I", "thou", "he" (or "she"), "we", "you", and "they" cover between them all experience of persons and their relations, and that a description doing justice to each of them will be a sufficient description.

The two methods commonly employed in psychological investigation are experiment and introspection. Neither the one nor the other nor both together can give us a complete description of a person. Experiment treats the person impersonally. It aims at eliciting and observing responses, that is to say, external behaviour, and does not in principle differ from experiment in chemistry. It may tell us much about processes, but it abstracts from the personal character of the processes. If it is suggested that there is nothing else but processes, and that the rest of this paper is superfluous, the reply is that in every experiment there is at least one person in the picture, and that is the experimenter, who thinks and acts with a purpose, even in the act of denying that thinking and acting with a purpose are possible. The person cannot be completely abrogated, and experiment as commonly conceived never even reaches him. If, of course, instead of studying specific responses, we keep a human agent under observation in all his doings—and this might fairly be regarded as an extension of experimental mood—we do treat him as a person, and our evidence is correspondingly valuable. Even then, however, we treat him only as a third person. We should not know what a person was in his full extent merely by observing him. We should have to combine with the observation a direct



acquaintance with oneself and with another; or, in grammatical language, we should have to experience persons as first and second.

The case of introspection is more complicated, because introspection may be of two very different kinds. It may consist of an attempt to seize in oneself psychical sequences inaccessible to experiment. In that case it stands to the apprehension of the first person exactly as experiment stands to the apprehension of the third person: it fails because personal experience cannot be constructed out of subordinate processes. On the other hand, it may consist of an internal alignment of the self with the self as a whole, in which the subject is revealed to himself *as* a subject. Here there is a genuine experience of the first person, which each person can possess only in respect of himself. But such an experience of first-personality, while undoubtedly authentic, is by no means complete. The first person as apprehended in introspection is one term of a relation, and it cannot be adequately described without reference to the other terms. As a matter of fact, even in introspection, second and third persons are vaguely adumbrated in the surrounding "field of inattention"; and this in itself suggests that introspection abstracts from ordinary experience. But ordinary experience, if allowed to speak for itself, declares decisively that a first person requires second and third persons as a complement of his own first-personality: a first person who is nothing but a first person is not really a first person at all. If this is so, introspection cannot tell us everything about personality.

It may, however, be argued that what experiment and introspection cannot do separately, they can do together. In our language, this would mean that the person can be constructed out of partial third-personal perspectives and partial first-personal perspectives. The evidence of the other phases, including that of the important second person singular and first person plural, would be entirely ignored. This in itself would surely be indefensible. But the significance of the omission emerges only when it is realized that the phases

in question are those in which the interdependence of persons is most evident. It is actually displayed in every phase of personal existence, but in the cases of the first and third persons singular it is easier for those who begin by abstracting from it for special purposes to end by ignoring it.

The identification of the first person in introspection is satisfactory as far as it goes. Every person, to himself, is a first person. He is not simply so much behaviour: that is why those who think that he is try to abolish the first person. He is revealed to himself first of all as feeling, and secondly as an originating source of behaviour. Feeling is the passive side of being a person, the terminal point of the impact to which he reacts: and tends therefore to turn attention inwards. The first person as pure feeling finds himself in a world of his own. Origination is the active side of being a person, and its reference is therefore outwards. The first person as pure activity is revealed as a contributing member of the world in which he acts. In the complete person feeling and origination go hand in hand, feeling being transformed from its native receptiveness to be a driving force. Too much weight on feeling separates the person from the nourishment of the world to which he belongs: and action which is based on raw feeling perpetuates the separation in the form of selfishness or irresponsibility. On the other hand, without feeling, there is no origination, and no power of effective action: as Hegel observed, "nothing great has ever been accomplished without passion". The two characters revealed in the first person in introspection are both essential to his full description.

It may, however, be said that origination, equally with feeling, is purely inward, and that the first person has therefore no outward reference and no implications outside itself. Now there certainly is origination, especially in the realms of intellection and of art, in which the first person is not immediately related to another person: and as psychologists who are not materialists have usually concentrated on cognitive activity, it is not surprising that they have discussed the problems of personality in terms of the isolated individual.



But a first person may also be discovered in mutual relations with another first person: and here interpersonality is the essential feature. It is therefore at least part of the description of a first person that he stands in a certain relation to others. These others, however, are equally, for themselves, first persons. Each first person, therefore, stands in relation to other first persons, and, for those others, is a second or a third person, as they are for him. Every person is both the first person of his own perspective and the second or third person of the perspective of others. A full description will have to envisage him in all these capacities. He is, not merely what he is for himself, but also what he is, either through a direct or through an indirect relation, for others.

It is a possible alternative view that a person really is what he is as a first person only, and that his second- and third-personal characters may be resolved into what he seems to be to others. It suffers, however, from two defects. In the first place, even if the second half of the statement were true, the first half would not necessarily follow. What a person seems to be to others goes to the making of his personality. He may be considerably changed by his response to the reputation he has, or by fulfilling the expectations which centre round his office. But, as a matter of fact, the second half of the statement is not true. It is plausible only because of a certain ambiguity. "What a person is for others" may mean either "what they conceive him to be", or, "what he is in virtue of his personal relations with them". In this latter sense he cannot possibly be what he is simply as a first person. He is what he is in relation to them as they are, and *vice versa*. As belonging to their radiative area, i.e., by being a second or third person, he is different from what he would be if (*per impossibile*) he were outside it.

On the other hand, from the reciprocity of first persons follows yet another argument against their resolution into so-called "objective" processes. Any first person who resolves another could equally well be resolved by that other: and if both were resolved there would be no one to do the resolving.

If A is resolved into perspectives of B and C, B and C are, on their own showing, what they say that A is not: and A could, on their own showing, say the same of them, with just as little warrant. Thus, if behaviourism is true, not only is behaviourism impossible (for no *-ism* is merely behaviour), but the behaviourist is impossible, for an *-ist* is an agent, with a perspective on other agents: and an agent is not merely behaviour either. The behaviourist can consistently resolve others only if there are no others to resolve him. He retains his own humanity illegally in a world which he has dehumanized. For all that he uses the term "religious" abusively, he plays Providence to his puppets.

However, as we shall see, there is a difference between non-personal processes and third-personality in the strict sense: and it might be argued that though persons are not simply processes, they really are not what they seem to themselves (i.e., first persons), but what they are objectively (i.e., third persons). There are three main objections to this view. (1) The third person is, by definition, an object of reference, and only a first person can do the referring. The difficulty here is exactly parallel to the difficulty of thinking persons away into processes. (2) If by "existing objectively" we mean "existing really and truly", a person may exist as a subject and objectively at the same time. Moreover, the whole terminology of the objection is epistemological, and the first person is not to be identified with the epistemological subject.<sup>2</sup> (3) A good test is to replace the first personal pronoun by the third in any ordinary statement, and to see if the meaning is the same or different. This point is excellently taken by Otto Jespersen in his *Philosophy of Grammar*, in disputing the common view that a pronoun is a substitute for a noun.<sup>3</sup> He points out that "I see you" is not a substitute for "Otto Jespersen sees Mary Brown": neither "I" nor "you" is wholly contained in the names for which they are supposed

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<sup>2</sup> This statement is here made dogmatically. The argument by which it is established follows later in the paper.

<sup>3</sup> On p. 82.



to stand. Moreover, if "I" and "Otto Jespersen" (the first personal pronoun and the third-personal object of reference) meant the same thing, the legal formula, "I, Otto Jespersen, hereby declare . . ." would be a tautology, and any attentive analysis shows that it is not. The example indeed shows that a person must be third as well as first, but it shows even more clearly that he must be first as well as third.

This, however, is a digression: the point from which it started was that some first-personal activities, and therefore the first person as a whole, involve a reference to other persons. The further discussion of this issue will require an analysis of second and third personality. But two preliminary observations may be ventured. In the first place, the unity of situation between a first person and those who, in his orbit or perspective, are second or third persons, though first persons in their own, ought not to be interpreted as a unity of structure. Membership of a social whole is neither the only nor the most significant form of personal relation. In the second, nothing has yet been said about the kind of relation which should exist between one person and another if each person is to be fully a first person. All that has so far been said is that there must be some relation. Thirdly, the fact that there must be some relation does not prevent some first persons from trying to be first persons on their own account. So much must be said at this point to avoid misunderstanding. The issues raised will be developed later.

It is part of the definition of a second person that he can exist as such only in relation to a first person. It is his nature to be an "other" in an interpersonal relation: and an "other" cannot be such by himself. A second person is in fact a first person looked at from the point of view of another first person. The relation is not absolutely reciprocal, for a first person may in some of his aspects stand in relation not to a second but to a third person: but within the relation of first and second persons (which might equally well be described as the relation of first and first) there is reciprocal radiation, and it is

precisely the reciprocity which distinguishes the relation between first and second persons from the relation between first and third. By reciprocity is meant not merely mutual implication, though this is in fact involved: not merely is it that the second person can only exist as such in relation to a first person: but also in the relation the person who is a first person for himself is a second person for the other. The term used to describe this relation is "interpersonal": and "interpersonal" does not mean "social". Social relations, as we shall see, are essentially third-personal. An interpersonal relation implies, so to speak, *interchange* of radiations; in a social relation there is merely an *intersection*. As first and second persons meet and clash and love without concealment. Naturally, the intensity of the relation varies from moment to moment, and its rarer and finer flashes break out only infrequently from a background of comfortable habituation. But, whether in their white heat or in retrospection, they are the most coercive of all testimonies to the uniqueness of personality. Here is no relaxing and levelling rule of law, no mercifully mellowing haze of *oratio obliqua*: here is only the glare of two bright lights striking on each other. Rarely do we experience a keener sense of realities: but to emotions adjusted to the equabilities of ordinary social life it is somewhat disturbing. Certainly the British peoples, those exponents *par excellence* of low-temperature sociality, prefer to be screened from it behind the smoked glass of conventional affability: perhaps because they have a peculiar capacity for it which would exhaust them if too frequently indulged. At any rate they have slurred a delicate emotional distinction by abolishing the second person singular as a form of address. They dissipate the "thou" over a collective "you". The complaint alleged to have been made about Gladstone by Queen Victoria, that he would keep addressing her as if she were a public meeting, could be extended to include all who use the English language.

It is not enough, however, to identify and to exalt the first-second personal relation: for it takes different forms, and



it is the function of our analysis to distinguish them. (1) One first person's radiation may be stronger than the reciprocal radiation. This does not in itself destroy reciprocity: in the form of leadership (which is the opposite of domination) it often elicits it. Real leadership demands personal integrity on both sides, and is strengthened rather than weakened by free criticism, which is not at all incompatible with respect and admiration. The balance, however, is not easy to maintain, and leadership wrongly conceived or practised is a common cause of perversions in the interpersonal relation. (2) The two radiations may be roughly of equal power. Here the reciprocity is more apparent and easier to maintain. There is a tendency for inequality to make of one of the parties, so to speak, more of a second person than a first person. Where there is equality each preserves his first-personal character. (3) This equipollent interpersonality reaches its climax when each first person deliberately recognizes the second person as a first person in his own right. Through his recognition there arises an ideal of conduct: and though an ideal of conduct cannot originate the conduct which it idealizes, it can sustain the average standard, keeping it alive through the "dull patches" and giving it permanence and solidity. Interpersonality will then cease to depend on spasmodic revelation and become part of people's lives. Indeed, it is usually as the result of the permanence that the revelation appears. Here, at any rate, is the fullest expression of the relation between first and second persons: here is the supreme achievement of the ethical imagination. The "thou" is accepted on each side as another "I".<sup>4</sup>

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<sup>4</sup> It should be observed that the relation of "thou" and "I" is normally a relation between component members of a "we". The profoundest friendship is that which is based on a common pursuit of an objective or ideal, or, at the very least, on a differentiation of function founded on mutual agreement. People who are concerned with nothing but each other are apt to be both discontented and tyrannical. (Cf. the magnificent description by Tolstol, in *Anna Karenina*, of the boredom and irritability which overwhelm the soldier, Vronsky, when he resigns his commission rather than give up his mistress, and has nothing but her to live for.) On the other hand, as we shall see later, there are many "we's" which do not involve the relation of "thou" and "I".

We have been concerned so far with what may be called the pure forms of the interpersonal relation. We now pass to its corruptions. It may be said to be corrupt when its external semblance is maintained in the absence of its animating spirit. A good example is the deliberate exploitation of a stronger radiation. A certain unilaterality does not in itself destroy the interpersonal relation. As in the case of a good teacher, the stronger may be disinterestedly concerned for the personality of the weaker. But if the stronger is conscious of his influence and seeks to maintain it, or even if, without his being conscious of it, his acts indicate a desire to maintain it, he changes the whole character of the relation. The second person is no longer treated as a person at all, but as a means to the fulfilment of an irresponsible first person. The form of address, as before, is "thou": the directness of the personal relation remains: but the mutuality has passed out of it. The second person, while remaining a person and acknowledged as such, is expected to behave as a thing. It is essential that he should be acknowledged as a person, both because his personal aptitudes are valuable to his oppressor, and because to treat a person as a thing gives rise to a far more exquisite sense of power than to treat a thing as a thing. The whole point of oppression lies in first postulating the personal relation and then perverting it. It thus comes under the heading of interpersonal relations, if only as an illustration of the maxim, *corruptio optimi pessima*.

The perversion of the personal relation is not, however, restricted to overt expressions of the lust for domination. Its most subtle, and in some ways its most deadly, inroads are made under cover of solicitude and affection. (There is something softly sinister in the neuter terminations of endearing diminutives in languages like Greek and German.) It is displayed wherever kindly and superior persons do things for people instead of standing behind them while they do them for themselves. It is displayed, in a similar way, in the tactics of propagandists whose sense of the personal integrity of others is submerged in their passion for missionary fodder. It is



displayed in all deliberate attempts to communicate feeling without appealing to intelligence.<sup>5</sup> In none of these cases is there intention to injure: there is only a half-conscious belittling, an assumption that the other can be treated as a field for one's own benevolence or idealism, which is quite compatible, and normally combined, with a sincere desire for his greater good. Yet it is possible to argue that such clandestine extension of the self over others is more destructive of the interpersonal relation than open enmity. In enmity, at least, we recognize the other *as* an other. Compared with patronage and condescension, it is honest and upstanding. To fight, at least, is not to degrade. There is indeed much to be said for Professor Macmurray's citation<sup>6</sup> of it as an example of interpersonality in its pure form. It is true that enmity usually has the ulterior object of imposing one will by force on another, and Professor Macmurray's conclusion is probably reached by isolating the moment of chivalrous antagonism from the underlying nefarious intention. But, for that moment, the disruptive polarity of the relation is relieved by a mutuality which, if taut and tense, is at least respectful: and, unless the defeat of one of the combatants is poisoned by humiliation, it leaves behind it no lasting animosity.

It is a point of some interest that in all these attempts to exploit the second person, it is not merely the second person, but the first person also, who suffers personal deprivation. The deprivation he suffers is that in proportion as the other ceases to be a real person, he himself ceases to be a real person. It is at least his intention not to be a second person at all: to satisfy his distorted craving for superiority, the radiation must be wholly from himself outwards. It may happen that, despite his determination to dominate, he will be met with a redemptive friendliness, and in that case he will continue to enjoy the status of second person. But, on any showing, this is very much more than he deserves: and he will not reap the

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<sup>5</sup> There is, of course, the legitimate infection of example: infection is suspect only when it is deliberate, and takes no account of the special needs of those who are meant to catch it.

<sup>6</sup> *Interpreting the Universe*, p. 135.

full benefit unless he makes a reciprocal gesture and acknowledges personality in the other. His intention was to disclaim the need of mutuality: and even if mutuality is offered him beyond his deserts, he must change his intention and *consent* to be an other if the damage to his personality is to be repaired. No person can exist as a first person only: and those who act as if they could fail to embody one aspect of personal existence altogether. To be a second person for another as the other is a second person for oneself is essential to being a complete person. It is common knowledge that those who are cut off from the respect and affection of their fellows are only half themselves. The egoist who refuses to be a second person lest he should admit the other as a first person may preserve the *form* of first-personality: he will continue to be a radiative centre: but having cleared the path and being secure against all comers, he will be progressively impoverished in content. He will put forth his influence more arrogantly than ever: but he will have less and less to give, and he will have less and less to be.

Our analysis of second-personality has now led us to the conclusion that is an essential aspect of personality, and that psychology should start not, as the introspectionists start, from one end of the personal relation, and not, as the experimentalists start, from outside the relation altogether, but from within it, and from both ends at once. The mistake of the experimentalists has been to suppose that no examination could be free from subjective bias unless it was external. This is to eliminate from consideration all the factors discussed so far in this paper, and it amounts to a refusal to accept evidence because it is foreign to the investigator's habit of thought. An objective examination must at least include the examination of subjects: and subjects can be examined only *as* subjects. But if the only alternative to a purely external review were the review of a single person's activities from his own point of view, the experimentalists would be right in their accusations, if not in their claims for themselves. And this is the only alternative which is normally offered them. It is true that



the single person who is the object of psychological study is not any one particular person, but only an average or abstract sample: and as such I am not sure that he does not suffer from the defects of Berkeley's famous triangle, which was neither scalene nor isosceles nor equilateral, but all and none of these at once. But his impersonality, so to speak, does not remove his subjective isolation. He is still considered without reference to another. And the argument has clearly shown that such a schematized abridgement of a man is hardly a man at all. The material of psychology should be drawn not from statistical nonentities, but from history, sociology, and casuistry, and above all from the unsorted testimony of friends and neighbours. Otherwise, *facilis descensus Averni*: easy is the slope of physiology.

For the failure to set the person in his context the blame rests largely with the traditional emphasis on epistemology. For epistemology, the person is, in the first place, considered merely as a knower; and, in the second place, even as a knower he is separated from the social and personal conditions under which he comes to know (that would be called mere psychology) and studied merely as a factor in the cognitive relation. Now the cognitive relation is one in which the first person is in fact least directly connected with other persons. It is true that both science and philosophy are increasingly dependent on the co-operation of diverse talents and training, but this is effectively concealed by the abstract character, however legitimate its abstraction may be, of epistemological study. The relation which it investigates is that between a single knower and the things which he knows.

Even realist epistemologists are not guiltless in this matter, for, though they are at pains to show that being known is only one character of what is known, they are not so careful, as long as they are thinking epistemologically, to show that knowing is only one character of what knows. Insofar as they fail to make this clear, they are still not far removed from the conception of a "thinking substance" or a "transcendental unity of apperception". But it is the idealist

epistemologists who are the main culprits. In holding that what is known can exist significantly only in virtue of being known, they class all experienced objects together in dependence on the knower. In this respect, at least, other persons are on the same plane as things. Each person is in the centre of his own orbit, and other persons fall within that orbit. There is, it is true, a certain left-handed reciprocity in the matter, for each person falls within the orbits of others: though the idealist-individualist tradition rarely indicates that the intersection of perspectives is an epistemological problem. But, admitting that there is reciprocity of a sort, it is exclusively that of first and third persons. It is a case of "savoir" or "wissen", not of "connaître" or "kennen". "I know about you" balanced by "You know about me", is certainly fair play, but it is not reciprocity, unless that name can be attached to an unspoken understanding not to be reciprocal.

It has now been shown that a person cannot be known simply as an object: he must also be known, in the direct first-second personal relation, as another subject. But it is equally important—to return to the original point—to observe that the subject in the knowledge-relation is not identical with the person. A person, by the mere fact that he is a person, stands in active relation to other persons, and not simply in the relation of knowing or being known by them. This may be confirmed by referring to the negative instance. The thinking of the friendless or thwarted may be keen enough, but, owing to a defective immediate experience, it will be crooked from the roots upwards. Good thinking is vitalized by a whole personal experience. But personal experience involves interpersonal experience. Epistemology, if not exactly a department of sociology, is an abstract inquiry into part of a field which sociology studies as a whole. The point of view of the pure knower is not the point of view of the complete person.

We now pass to the consideration of the third person: the most baffling, perhaps, of all the modes of personality, for



it is in one sense impersonal, and yet personality is incomplete without it.

The ordinary conception of the third person is that of an object of reference. The "other" is being talked or thought about, like any other object. He may be, and usually is, understood to be a special kind of object, referred to by a masculine or feminine pronoun, and to be distinguished from other and non-personal objects: but he does not appear to the knower as a subject like himself, standing in a personal relation to him. Knowledge of third persons is always "about": it is never, like that of second persons, direct and intuitive. The knowledge of third persons stands to the experience of persons much as a currant stands to a grape: the content is recognizable, but the vital sap has disappeared.

There is, however, a practical relation which corresponds in all these respects to the cognitive relation, and for that reason falls under the heading of third-personal relations. That is the relation in which one person or a number of persons prescribes for others, or obeys together with others, rules or institutions through which their actions can be mutually adjusted. It is, in fact, the political relation, active or passive. The political relation is not a first-second personal relation: those who prescribe do not know the majority of those prescribed for, and those who comply for the most part do not know each other. Moreover, it cannot be replaced by a first-second personal relation in any considerable community. Attempts have been made, both in theory and in practice, to ground political association on personal acquaintance. Aristotle proposed to limit the size of the city by the range of a herald's voice. Rousseau believed that the general will could be elicited only in a general assembly. The whole city-state tradition in which they were both reared grew up originally round the family hearth. In modern times, Christian communist settlements, of which the "Bruderhöfer" are the most interesting post-war examples, holding that all communities based on anything less than brotherly love must ultimately depend on violence, have built their social and

economic life on the fraternity of a large congregation. But for all the extended purposes of modern civilization such communities, even if accepted as a basis, would have to co-operate in a federal system, and federalism would immediately involve a system of impersonal relations. Moreover, even within a society of pure persons, justice could be maintained only by putting personal ties and commitments in the background. It is impossible to decide *between* claims on the basis of a first-second personal relation. Each first-second personal relation is unique and incommensurable. The second person, even in enmity, and still more in friendship, occupies a position of privilege in the foreground. To measure justice by the intimacy of one's own feelings is to open the way to favouritism and vindictiveness. The only way to be "fair" is to discount all first-second personal relations, and to throw all claimants strictly into the third person.

No doubt a limited society based on mutual acquaintance and understanding may maintain within itself standards of conduct and efficiency which are not easily diffused over a whole community: and perhaps it is an obscure feeling to this effect, as well as a sense of advantage, which impels it to resist dissolution in a larger and less homogeneous order. Yet England in the eighteenth century, which prided itself particularly on its class of trained statesmen, was fatally subject to patronage and personal influence. Moreover, exclusive personal loyalties may be indulged without any pretence at compensating efficiency of service, and then they reduce government to organized plunder: as, for example, under administrations such as Tammany, which have substituted for the relation of "citizen" and "ruler" the relation of "henchmen" and "bosses". In most administrations the lobbying of acquaintances is a subtle threat to probity. The rectitude of French deputies is severely tested when they are expected to obtain from the central government municipal sinecures for all the "thou's" of the commune: and even English municipalities have been known to hand out perquisites, usually in the typically national form of business contracts, to councillors'



friends and relations. The intrusion of "thou" into a world of "he's" obviously has its disadvantages. We may feel that Prince Hal disposed somewhat scurvily of his former associates when he ascended the throne; but to concede any special favour to Nyms and Pistols and Bardolphs would have been an offence against every canon of good government.

It would seem, then, that there is a relation between persons which is best described as a first-third personal relation, and that there are circumstances under which it is a more appropriate relation than the more purely interpersonal. It is a safeguard of impartiality: and it can be diffused beyond the limits of personal acquaintance. Its formula is "anyone": "trespassers will be prosecuted" is not a threat to Jack Jones, but to all and sundry. But, like the first-second personal relation, it has its corruptions. The political relation treats the citizen as an object of reference and not as a person. It can do and say things to him as an object of reference which, in a purely personal relation, would be injurious. It is only on the basis of a strict third-personality that the dignity of the citizen can be maintained. Consequently it is impugned the moment that governments, masquerading as persons, treat them as second persons. In recent German plebiscites the voter has been directly interrogated as "Du". The question is just offensively familiar, and assumes the prerogative of intimacy where intimacy is out of place. At least in his official capacity, it is the business of the ruler, in deference to the dignity of his subjects, to keep his distance.

So far we have discussed the political relation between ruler and ruled, which we have described as a first-third personal relation. But there is another form of the political relation, that between subject and subject, which is better described as a third-third personal relation. It is, so to speak, third-personal on both sides, for neither party to it need have any direct acquaintance with the other, and all he does is to recognize the defined claims of another, whoever he may be. In this way he can regulate his behaviour in advance towards

people in general. Now it is just this kind of regulation which is the immediate prerequisite of organized society. The supreme social virtue is not personal understanding, but impersonal understandings. For example, we may find it difficult to get on terms with a colleague; but if we give him strictly what we owe him as a colleague, the concern will go, and will not be held up by a failure of imaginative sympathy which, at the best, it will take time to remedy. So, in endeavouring to measure one's own claims against those of others, the only possible method is to put oneself into the third person.<sup>7</sup> In the more intimate personal relation, we may elect to "go the second mile", and forego our claims altogether. But, in the first place, this surrender has no meaning if we have no claims, as third persons, in the first instance; and, secondly, sooner or later the need for the sacrifice which is to restore the other has to be balanced against one's own legitimate claims, for to forego them all is to leave no resources from which to make the sacrifice. Rights do not cease to be rights when we cease to press them; and if, at some point or other, we did not maintain them, we should not, at other points, be able to dispense with them. There is, however, the world of difference between rights, which are the claims of a third person, and the claims of the self-isolated first person, which are purely subjective in origin, are limited by no recognition of similar claims on the part of others, and the principle of which is not rational accommodation, but bare assertion. The former are compatible with the essential social virtues of detachment, humour, and irony. The latter are pompous and egotistical, and, what is worse, vulgar.

As the third person may be denoted by a neuter, as well as by a personal, pronoun, it should be observed that the treatment as third persons of others in general, or of another, or of oneself, is by no means to depersonalize them. Both their feelings and their rights are respected. To disregard in others the essential human attributes, or, while recognizing them, to

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<sup>7</sup> In truly personal relations, on the other hand, the method is to put the other into the first person.

set about abasing them by deliberate contempt, is not to treat them as third persons, but not to treat them as persons at all.

We have seen that relations involving third-personality are not reducible to those involving second-personality, and that in some situations are the only relations which are congruous and appropriate. But, for all that it is the first-second personal relation which is central, and gives meaning to all the others. Aristotle showed all his customary shrewdness, and more than his customary imagination, when he observed (*Ethics*, 1155 a 23) that "friendship is the bond which holds states together", and that "legislators set more store by it than by justice". His form of statement may be disputed, for friendship cannot be a substitute for justice; but there is a deep fundamental truth behind, for the man who is deficient on the side of friendship will be formal and abstract in his approach to justice.<sup>8</sup> The first-third and third-third personal relations are public and schematized commutations for the first-second personal relation. It is not the business of the administrator, or of the ordinary citizen, to show respect of persons, but it makes all the difference whether he shows respect *for* persons. He would not perform his function with the same inward understanding if, in other contexts, he did not know what a first-hand personal relation was like. This is implied whenever we hear an administrator criticized as able and upright, but cold and heartless: as regards the form and intention of justice, he is impeccable, but, because he lacks imaginative sympathy, it offends by lack of graciousness. In the same way, in private life, the scrupulous fairness of the unloving falls dead through lack of generosity. This does not mean that the administrator or the citizen can afford to be influenced by any consideration other than justice. But it does mean that their justice will resound more responsively in men's hearts if they are also in other contexts versed in the more intimate personal relations.

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<sup>8</sup> Cf. Reinhold Niebuhr, *Moral Man and Immoral Society*, p. 258: "Any justice which is only justice soon degenerates into something less than justice."



On the other hand, it must be emphasized that the first-second personal relation cannot be extended to all members of a political community. Even the Greek city-state, in which personal and political considerations were less distinct than in the nation-states of today, the discrepancy of range between friendship and citizenship proved insuperable. As Aristotle (once again) remarked with devastating good sense, "people who have a host of friends seem to be nobody's friends" (*Ethics* 1171 a 16) : and again, "it is impossible to be especially friendly with more than a few people" (1171 a 10). The intensity which intimacy demands cannot be spread thin without disappearing. As an ingredient of social life, it can be preserved only indirectly in the more workaday structure of justice. On the other hand, its presence in individual lives acts like a tonic for the social order as a whole.

It will be objected, however, that in attempting to explain social life in terms of political third-personal relations, we have been blind to a whole set of social facts. Sociality, it will be said, does indeed involve the judicial and equitable third-personal attitude; but this politico-legal framework or superstructure is merely incidental. The outstanding feature is an inspiring sense of solidarity. Now solidarity takes us straight from the singular to the plural. Its special pronoun is "we". And "we" describes a unique relation not to be analysed into "thou and I", and still less into "he and I". To understand the social relation in the strictest sense, as opposed not only to the personal but also to the political, we must throw the emphasis on this new conception, even if we admit, as subordinate ingredients, some others which we have already examined. It will be maintained that an objection so expressed would be valid. The analysis of "we", which would follow in any case in the traditional order of grammatical conjugation, is equally required for our account of the relations in which persons find themselves standing to each other.

In the first person plural there is a coalition or identification of intention and effort in which all conjunctions between singular pronouns are obliterated. In the interpersonal rela-

tion, "I" and "thou" are distinct, though reciprocating, personalities: but in the common purpose and action denoted by "we" they can be represented as forming a unity. This need not be taken to mean that there is an actual fusion of minds: indeed, I have previously argued before a conference of this association that there is not.<sup>9</sup> But, without being fused, they are, so to speak, aligned in a common enterprise: the emphasis is not so much on their relation to each other as on their joint relation to something else. Their identities remain: "I's", so to speak, can walk in and out of "we's": but they feel themselves, and are publicly considered, to be united in their behaviour to others. Their unity may be based on friendship, and it may be cemented by a sense of justice: but it does not absolutely depend on either, and it transcends both of them, even when present, by enveloping their "over-against" in an inclusive "with".

It is at first sight plausible to suppose that the first person plural represents the telescoping of the parties in a first-second personal relation to form the subject of another relation. Now it is true that wherever such a process occurs, there is a first person plural: but it is not true that all first persons plural represent a first-second personal relation. To begin with, there are extended "we's", covering whole communities, which are held together not by personal contacts but by administrative unity and a sense of citizenship: and here the first person plural represents a mass of relations involving the third person. But, even taken together, these two types of "we" are not exhaustive. To suppose that they are is to make the same kind of mistake which Plato made in the first book of the *Republic*, when he argued that the coherence of a robber band must be due to justice. Actually, as has often been pointed out, it may be due to nothing more than a lively sense of the coincidence of private interests. In an extreme case, there might be no first-second personal

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<sup>9</sup> At the conference at Sydney in 1936. The paper was published in A.J.P.P., June, 1936, under the title "Social Psychology: a Philosophical Analysis".

relations in the band at all, but merely an aggregate of self-isolated first persons, cynically practising the duties of third persons as a means to individual aggrandisement. A "we" can, and often does arise from a coalition of first persons detached from their moorings. In any large society, the purposes of which result from the telescoping of many different simple relations, the three elements of self-interest, justice, and friendship are almost inextricably combined. Hence it is that the attacks which from time to time are made on the element of self-interest are always resisted quite sincerely by others who have found in the institutions attacked their most authentic experience of justice or friendship.

It would be unfair to under-estimate the selflessness of many individual and social combinations which can be referred to in the first person plural, and it is well to remember that without them no good purpose could be realized on a large scale. But, in view of the prevalent tendency to identify idealism and unselfishness with the egotism of nation or class, it is perhaps more necessary to emphasize the extreme difficulty with which any body designating itself as "we" escapes the pitfall of self-satisfaction. People who are quite forgiving and unpretentious with each other can be strangely vindictive and bombastic when they stand together in relation to something or somebody else. It is perhaps not unduly cynical to say that "we" is a refuge for repressed "I's". Where the passion for souls is absent, and personal relations are regulated largely by the formal give and take of organized life, there is no emotion strong enough to oppose the pressure of irresponsible first-personal self-assertion: which, though subdued in the interest of social proprieties, still lurks round the corner awaiting its opportunity. In collective action it finds what it wants. It can sincerely recognize all the duties which were previously forced upon it, because it can now combine them with its own demands. It can renounce all its claims within the circle, because it has unlimited satisfaction outside it. Naturally, the extent to which this motive prevails in any particular "we" cannot be determined by any general



theorizing: and some are comparatively free from it. But even the most altruistic collectivities are not above it. Marriage, which offers supreme opportunities for the finest interpersonal relations, may easily become, as Mme. de Stael put it, "*cet égoïsme à deux*"; and organizations which exist entirely for good works have been known, like the first disciples, to resent the casting out of devils by a rival process. "We" is the condition of effective achievement: it is also too often the grave of decent intentions. But, fortunately, the spurious amber may contain quite a good bee: within the limits of collective arrogance there is room for the most genuine personal relations.

However, our main object here is to distinguish "we" from other pronouns and their combinations. We have urged that the relation which it describes is significant and unique: and that the relation which results from it is the social, as opposed to the political and the interpersonal. If this conclusion is correct, it will follow that a full description of personality involves a reference beyond the limits of any one person, to his mutual alignment and pooling of effort with other persons.

To continue our parade of grammatical forms (which by this time must be becoming somewhat wearisome), we must effect an analysis of "you". The second person plural resembles the second person singular in that in each case there is a direct personal confrontation. But the level of personality at which it takes place is much nearer to the surface, owing to the greater number of persons involved. On one side, at least, if not on both, there is a "we"; and even in those cases in which a "we" conceals a genuine "I" and "thou", it does not display them as such to the other party. "You" implies "we" or "I", and even has reciprocal dealings with them: but the reciprocity is not so much one of persons as of collective efforts. The component persons of "you" have somehow become opaque, as if the indirectness of the third person had spread upwards into the second person. Sometimes the relation of "we" to "you" is one of command: and the relation of command, more particularly when orders are given to large numbers, is always

tinged with third-personality. Men are addressed, not indeed as things, but as sample men, or men performing functions: the more subtle and significant personal differences are for the moment irrelevant. Sometimes, again, the relation of "we" to "you" is one of contrast: we are of one kind and you of another. Here again the connexion is somewhat impersonal: either they steer clear of each other by a delicate process of social adjustment, respecting each other as third persons, or they rise up in antagonism, behaving collectively in the same way as irresponsible first persons behave to each other individually. In neither case is there genuine interpersonality. Finally the relation of "we" to "you" may be one of solidarity. In that case each is merely repeating the process through which "you", as a "we", first emerged. Together, they will become a bigger and better "we". But if, in the original "we", "thou" and "I", if there at all, are concealed behind a collective front, they will be doubly concealed behind the new collective front of simpler collectives. In "you", as in "we", the original personal relation is submerged by an act of association in which new collective unities are created, and in which the depth of the original persons is sacrificed to the extension of their joint activities. Yet the extension itself adds something to personality. The person cannot be defined without reference to the plural modes.

We may dispose briefly of "they", for it appears to raise no principle not already discussed under "he". It is, however, at one further remove from the fundamental personal relation. It takes third persons collectively while "he" takes them distributively. This collective treatment is, as we have seen, a character of the plural in general: and that is why the plural pronouns give us only a shorthand abbreviation of personal relations.

We may now try to present the various attitudes of persons in succinct form. We have identified them as follows:

(1) The feeling and striving "I", discovered in introspection, which is the primary evidence for the distinctness of persons from things, but which only exists over its full

extent in the whole cycle of its relations with others: though in cases of injured self-esteem or extreme self-consciousness it is apt to break its own vital links and to make itself an exclusive centre.

(2) The direct relation of "I" and "thou", which we have called the interpersonal relation, in which each "I" is a "thou" for another, and that "thou" is an "I" for him. In this relation alone is personality revealed in its full depth. Nothing can stretch the powers of the person like being a "thou", that is to say, an "I" for another, unless it is being an "I", that is to say, a "thou" for another. If this sounds like the more muddled kind of mysticism, we may appeal to Freud, who has plenty to say about the effect on personality of being unloving and unloved.

(3) The relation of "I" and "he" (the first-third personal relation), "he" being a "thou" indirectly apprehended and acted upon, about whom an "I" makes plans, without, however, disregarding his essentially personal nature. This is the relation of political or "distributive" justice, and as such is an essential condition of organized life. In practice, without the shelter which it provides, the interpersonal relation would be harder to sustain, even though it is less than any other relation subject to external constraint.

(4) The relation of "he" and "he" (the third-third personal relation), in which each person accepts equally for himself and for others the third-personal status (i.e., every "I" voluntarily becomes a "he") and learns to practise for himself the virtue of justice. (It takes an "I" to become a "he" in this way, but "he" it is from that moment forward).

(5) The first person composite "we", which may act as a cover for all the different relations between persons in the singular, but has as a common feature the collective concentration of the persons concerned in the face of a new situation. We have noted the sinister opportunities which it offers for a coalition of detached individualists, and also how it fosters the interpersonal relation: doing things with people being the best way of appreciating their personal quality.



(6) The second-person composite "you", which can only exist in correlation with "we" (or "I"), and is, in fact, a "we" taken as an object, but which, owing to its complexity, has no first-personal quality to bestow on that which is related to it, and tends to fade off into the third person under closer examination.

To this abstract must be appended two further considerations:

(1) Within the outlines of personality in all its diverse modes are all the time occurring those vital and quasi-mechanical processes which are sought out and described by "scientific" psychologists. These are the scaffolding on which personality rises, and we must not be provoked by solemn and reiterated assertions that cathedrals are scaffolding and nothing else to the equally foolish counter-assertion that cathedrals are too sacred to need any scaffolding at all.

(2) In the above summary there is one significant omission. There is no second-third personal relation. There can be none, because the second person implies direct experience, and the third person is incompatible with direct experience. A second person can exist only in relation to a first person. On the other hand, a first person can also be related to a third person, owing to the activity of discursive cognition. He can know about as well as knowing: and in acting he can maintain the distance involved in knowing about, while still in his relations with him recognizing the other as a person. The first person is the link between the second and the third, and they cannot be related otherwise.

Our description being now complete, the objector may now round on us in some bewilderment and inquire, How can a person exist in all these different modes at once? Some of them are incompatible with the others, and even of those which are not it may be asked how they can co-exist in an underlying substance. Moreover, he will continue, we have made the position still more difficult by giving one mode primacy over the rest. How can the real thing be identical with one of its manifestations? Does it not involve the

absurdity that the real can change into something else—the oldest absurdity in philosophy, perpetrated by Thales and corrected by Anaximander? Further, is not the person a single identity, unchanging in all his relations, and are not what we have called “modes” merely different views of that identical person taken by other observers? He calls himself “I”: his wife calls him “thou”: the registrar of births, marriages and deaths calls him “he”: as a member of a football team he says “we”, and another football team calls his team “you”. But does this mean that there is any change in *him*? Have we not merely so many snapshots, which may be necessary to complete the picture for outsiders, but leave the subject untouched?

The first set of objections centres round the conception of a person as a substance. The answer is that in this discussion the self is conceived, not as a substance, but as a continuing non-material process, throwing off portions of itself in the form of completed actions, absorbing new nourishment from experience and meditation, building his present on the stored resources of his past, reconditioning his past at every moment through the retrospective pressure of his present, and advancing in a spiral progression through a series of phases which are always recurring at a higher level. A person so conceived is an existent in time, and he does not “underlie” his experiences at all. He *is* his experiences. Their unity is not one of inherence, but of continuance. There is thus no problem about the co-existence of his modes: though in view of its historical association the word “mode” is not a happy one, and has been retained only for want of a better. The reason why a person can exist in different modes at the same time is that he carries forward what he is in one relation into his new relation. His complete character is founded on continuance and qualified by cumulation. It would, of course, be a contradiction that he should be a third person at the same time and in the same respect and in relation with the same other person as he is a second person: but in his third-personal relations he carries with him his second-personal experiences. There are,

however, cases in which even this degree of incompatibility cannot be imputed. A person not only *can* be first and second at the same time, but cannot be either properly unless he is the other at the same time. Surely the analysis of such a continuing and reciprocal creature must start from his whole accumulated existence.

If we abandon the conception of a person as a substance, it is easy to answer the second set of objections—those based on the primacy of the person as revealed in the interpersonal relation over the same person in his other modes. If the relation were in fact, as alleged, between a reality and an appearance, the criticism would be valid. But it is quite reasonable, provided it is borne out by experience, that the continuing and cumulative flow of personal existence should run now shallower and broader, and now deeper and narrower. It is not only reasonable, but it is actually a law of personal development: for a person can bring more to his deeper personal relations for having extended his broader ones, and *vice versa*. He is most himself when he runs regularly through the cycle, which he does, not in vain repetition, but progressively, owing to the cumulative character of spiritual experience. But the quality of his existence is most typical where it is most concentrated, and its range widest when it is most diluted. It is in the sphere of personal relations that the person, so to speak, is most at home. When the subject becomes abstract, as when he tries to shake off all responsibility, or when the other becomes abstract, as happens in relations involving the third person, and still more when the person is related to things, as happens when he is merely pursuing efficiency, the personal quality slowly fails for lack of response, and becomes assimilated to the more formal and mechanical world in which it moves. It remains true, none the less, that the extended and formalized phases contribute something which nothing else contributes to the total result.

There remains the accusation that the so-called mode is not so much a genuine phase of experience as the reflexion of one person in the consciousness of another. This view is



certainly suggested by the fact that the same person can be called "I", "thou", or "he" by himself and others respectively while engaged in precisely the same activities, and at precisely the same moment. It thus becomes necessary to distinguish between ways of being apprehended on the one hand and kinds of activity on the other. First, second and third persons may be understood in either sense. As we have seen, the difference comes out most clearly in the case of the third person. As a mere object of reference, as a person spoken about, the third person has no activities. On the other hand, there are activities in which we deliberately abstract from interpersonal concerns and consider ourselves and others with the same detachment as we show in the case of objects of cognition; and that is why we have described them as third-personal. The same distinction, however, can be illustrated from the case of first and second persons. We have seen in both cases how the form of address may remain the same while the effective attitude disappears. We still say "thou" when we are tormenting a victim, but the activity he is undergoing is not a genuine "thou" activity. There is a difference between what he is having done to him and what he is being called. In the same way I may refer to myself and think of myself as "I" when the activity on which I am engaged is not a genuine "I" activity: as, for example, when I let something happen which I consider ought not to happen simply because I cannot be bothered. The form of address is based on a distinction between kinds of activities, but it becomes formal and fails to discriminate them when they are disguised as each other. It points the way to the activities, and it is for that reason that we have used it as a clue. But now that it has led us to the activities, the activities can speak for themselves, and speak with a more certain voice.

We return to the point of psychological method from which we started, and towards which this inquiry was to be a contribution. It is now evident that an analysis of personality must follow it through all its phases and relations, and cannot be limited to the introspected "I", still less to the subordinate

processes usually studied by experimentalists. That we still tend to oscillate between these two inadequate approaches shows that we have not yet emerged from that irresolute compromise between idealism and materialism which underlies the whole cultural *malaise* of the nineteenth century. The realistic personalism towards which we have tried to show the way will endeavour to grasp the person whole, with his relational attributes clinging to him: indeed, it will aim at grasping not *the* person, nor *a* person, but persons in relation. Individual psychology will give place to interpersonal psychology. Not, it will be observed, to social psychology. Social psychology, if it means anything distinctive, means the psychology of societies, and societies have no minds to study. The alternative is not between the study of individuals as such on the one hand, and the study of alleged group minds on the other. Psychology is always concerned with persons, but those persons are linked together, not indeed in a system, but by their mutual dependence. Thus, though concerned with persons, it can never be concerned with only one person at a time. If it attempts it, it is condemned to juggle with abstractions. The psychologist who could take the complete human view of his subject, avoiding alike the formalism of science and the collectivism of sociology, is the man for whom we are looking; and, could he be evolved, he might well come to occupy the central position among the inquirers of his time.

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## THE PROBLEM OF CAUSALITY.

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By JOHN ANDERSON.

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CAUSALITY resembles the other main issues of logical investigation in that it presents the mind with puzzles. Hume's question, "Why a cause is always necessary", and the question why the same cause should always have the same effect, are examples of difficulties which have recurred throughout the history of thought. This is not to say that such difficulties cannot be got over; it merely indicates at once the importance of an exact logic and the tendency of the human mind to depart from or fail to reach exactness. It will be argued here that by the use of certain logical considerations (and particularly by emphasis on the notion of a *field*) the outstanding difficulties can be removed and a straightforward theory of causality developed.

We may take our departure from the question, often asked, why it is not just as natural and defensible to think that the same phenomenon has different causes, or the same agent different effects, on the various occasions of its occurrence, as to suppose an invariable order of events. The preliminary answer (allowing for distinctions to be developed later) is that, on the assumption of variability, we could not say that there was any causal connection at all. We could, of course, point out some succession of phenomena in any given case; but we could not say that the later phenomenon in question was any more "the successor" of the earlier one than anything whatever that occurred at the later time—and similarly with the notion of a "predecessor". It may be that, when X occurs, we rightly anticipate Y, but, since this anticipation may also be rightly made in the absence of X,



we have no right to say that it was X, and not some other factor W, that was the occasion of Y's appearance in the former case. In fact, we have no right to say that anything is "the occasion of" anything else.

According to Mill, in the consideration of Plurality of Causes as a case actually occurring in nature, "there is required no peculiar method. When an effect is really producible by two or more causes, the process for detecting them is in no way different from that by which we discover single causes" (*System of Logic*, Bk. III, ch. X, § 3). But the process of "discovering single causes", as he has expounded it, is one of excluding the irrelevant, by the consideration that that in the absence of which the phenomenon occurs, and that in the presence of which the phenomenon does not occur, is not its cause. The admission of "plurality" involves the abandonment of this position, and it would appear that any one of the "two or more causes" could just as easily be broken up—so that we are left with no method of discovery or even of elimination.

The point is that, in distinguishing the relevant from the irrelevant, that is to say, the necessary from the unnecessary, we are concerned with *general* conditions (necessity being equivalent to universality), and, if we do not find a general condition of a given occurrence, we are not answering the question that has been raised. If it were not a general question, a question of "sorts of things" and not of "mere particulars", we should have no right to speak of the irrelevant or, as already suggested, of a "connection". But it always is a general question. When we ask, for example, what causes this fire, it is not its being *this* but its being *fire* that we are seeking to account for. There might, indeed, be a special question of what causes fire here rather than anywhere else—it will be seen, as the discussion develops, that there is a particular sense in which "plurality" must be admitted—but, even so, it is fire, a certain sort of thing, that is the effect in question, and, if any distinction is to be made among

conditions of its production, it will be a distinction between different *kinds* of conditions. It is natural, then, that, to the question what causes a certain sort of thing, the answer should be "a certain sort of thing"; it appears that what we are all the time seeking to establish is a general connection, that is to say, a universal proposition, to assert which is to assert that something happens invariably.

It is a curious but commonly unremarked feature of Mill's logic that, while, in what he calls Induction, he professes to have a method of arguing from particulars to generals, he is all the time working with generals. His exposition of his methods depends upon the assumption that it is possible to enumerate the features of a situation—and, as these features are, of course, general, the situation composed by a finite number of them would also be general. This is a difficulty of a kind which is bound to arise on any theory of induction, and is only one of the difficulties of Mill's theory in particular. But it brings out the fact that, since we can never say that we have completely analysed a situation (every factor in it being complex, every feature having itself features), Mill's methods can at most indicate how we can verify a hypothesis previously entertained and not how we can establish a conclusion. It is illogical to speak, as Mill does, of a number of situations having *only one* feature in common or of our varying only one factor when we are experimenting. If, for example, a chemist introduces hydrogen into some mixture, it is not "pure" hydrogen, hydrogen as such, that he introduces, but a particular sample of hydrogen, differing in some respects from other samples. And while, in actual fact, these differences may be irrelevant to the result obtained, this is not *proved* by the introduction, however careful the experimenter may have been; there is only a verification of a postulated general connection between a certain kind of antecedent (the entry of hydrogen) and a certain kind of consequent (whatever it may be). But, it may be remarked, on the theory of variability referred to at the outset, there

would not even be verification; the position would be one of sheer guesswork—a position not relieved by the appeal to “probabilities” (the fashionable substitute for the “occult powers” of primitive superstition or the good and bad luck of ordinary speech) in place of connections of kind.

The inconsistency in which we have seen Mill to be involved in connection with “plurality”, turns on whether a cause is a necessary as well as a sufficient condition of an event’s taking place. In expounding his methods Mill implies that it is; thus, in his exposition of the Method of Agreement (l.c., ch. VIII, § 1), he says that “b and c are not effects of A, for they were not produced by it in the second experiment”, i.e., it is not sufficient for them; while the “phenomenon a cannot have been the effect of B or C, since it was produced where they were not”, i.e., they were not necessary for it. The theory of Plurality of Causes implies that a cause is only a *sufficient* condition of “its effect”, for, if it were necessary as well, this would imply that, in what we call bringing an effect about in different ways, we had, in introducing a second sufficient factor, also introduced the first sufficient factor, even though we were unaware of having done so—so that the event really comes about in the same way in every case.

Now it may be argued that we are frequently aware of different sufficient conditions of a certain type of event, without taking any or all of them to be necessary. To quote an example given by Mill in the chapter first cited: “One set of observations or experiments shows that the sun is a cause of heat, another that friction is a source of it, another that percussion, another that electricity, another that chemical action is such a source.” Leaving aside for the present the possibility that different questions are at issue in the different cases, we may note that on no theory will it be denied that there are various sufficient conditions of an event (indeed, on the theory of the infinite complexity of things, there will be various *necessary and sufficient* conditions of anything, these



all being necessary and sufficient for one another). But this is not to say that sufficiency is all that is required for causality, or that there is not a question of finding a necessary feature which is common to all the sufficient conditions. That question arises at once from the consideration of relevance. If it were merely the case that, when A is given, X follows, and that it follows likewise in the presence of B and in that of C, then A, B and C might have nothing to do with its occurrence.

The point here is not the possibility of error, the absence of conclusive proof. Generals require generals for their premises, necessity and sufficiency can be inferred only from assertions of necessity and sufficiency, and a causal connection can be proved only from causal connections already known. Where we do not have such knowledge but have only formed a hypothesis (e.g., that X always follows A), then we may get verification of it, but verification is not proof and is quite consistent with the falsity of the verified proposition. But, granting that verification may be all we are looking for, the question is what *sort* of hypothesis we have formed in suggesting a causal connection; and it is clear that we are at least distinguishing conditions under which something occurs from conditions under which it does not. If X occurred in any case, then it would be idle to say that it was conditioned in turn by A, B and C, merely because it ensued upon each of these. But if it did so ensue, and if A, B and C covered all cases, i.e., if, in A's absence, B or C was bound to be present, then X *would* occur in any case. It appears, then, that, even in enumerating sufficient conditions, we take them to be restricted in scope; we assume that a certain set of them (say, for the sake of simplicity, three as above) cover all cases of X's occurrence. That means that the expression "A or B or C" gives a necessary and sufficient condition of the occurrence of X. It may be, of course, that we do not look for such a set, that we are content with the knowledge that certain things are sufficient; it may be again that we

should regard "A or B or C" as a cumbrous and unsatisfactory solution of our problem, and that, as already suggested, we should look for some common feature of the three that would meet the case. But the important point is that, to whatever extent we may actually prosecute our inquiries, in the mere assertion of sufficiency the problem of finding a necessary *and* sufficient condition is already posed, and, if we deny that there need be such a condition, we make the very use of the term "condition" pointless.

If, then, it be contended, in accordance with Mill's first position, that by a cause we mean a necessary and sufficient condition (more particularly, a necessary and sufficient *precedent* condition), it will appear that a hypothesis of causality really involves *two* universal propositions, and, it may be said, requires a double verification. This is what is implied in Mill's account of the simplest use of the direct Method of Difference, where we first observe the absence of the factor in question as well as of the phenomenon it is supposed to cause, this verifying the supposition that the factor is necessary, and then observe the phenomenon ensuing upon the introduction of the factor, this verifying the supposition that it is sufficient. It should be observed, however, that, strictly speaking, the same observations verify both suppositions; the observation of A and B in conjunction verifies the supposition that A is sufficient for B and also the supposition that B is sufficient for A or, what comes to the same thing, A is necessary for B (the time-factor being neglected here for the sake of brevity). But the point about the double verification is that it informs us of the existence of "negative instances". The difference between the suggestion that the presence of B entails the presence of A and the suggestion that the absence of A entails the absence of B is, it may be said, that the latter lays it down that A is sometimes absent; and, accordingly, a verification of its absence is of importance. But, again, in strict logic, this is not correct. Unless A is just any condition whatever—in

which case to refer to it as a "factor" is quite off the mark—it will be a differentiating condition; it will be sometimes present and sometimes absent. In logical form, if A is something specific (and, if it is not, no assertion is being made), the assertion "All B are A" is equivalent to the assertion "All non-A are non-B", each being the contrapositive of the other. What is brought out by the consideration that there may not be "negative instances" is that we are concerned not with relations between A and B in general but with their relations within certain limits or in a certain "field"; and it is the consideration of the "field" that enables us to make the theory of causality precise and to clear up the difficulties in which Mill and others are involved.

For, while a verification of a proposition is necessarily a verification of any equivalent proposition and the two contrapositives formulated above *are* equivalent (or imply one another), the case is different when it is a question of a "virtual contrapositive" or "contraposition" within a field. An instance in which A and B are jointly present in the field X verifies the supposition that the presence of A entails the presence of B in the field and also the supposition that the presence of B entails the presence of A. But before we translate the latter assertion into the assertion that the absence of A entails the absence of B from the field, we have to be assured that A ever is absent from the field, and this assurance is given by the "negative instances". If, however, we knew in advance that A is sometimes absent from the field, we could make the transition in question without having to examine these instances. That is, granted that some X are not A, we can pass from "All X which are B are A" to "All X which are non-A are non-B", and we can go through the reverse process granted that some X are B; so that, in cases where we know that examples of two terms and their opposites are all to be found within a field, we can speak of propositions like the above pair as "virtual contrapositives", remembering that they are not strictly contrapositives and are



not strictly equivalent. We can now see what is meant by speaking of a necessary and sufficient condition of a certain type of occurrence within a certain field; and, assuming it to be a precedent condition, then it is what we call a "cause". In other words, if there is any force in the line of argument so far pursued, a cause is always a cause within a field.

On this theory the difficulties of "plurality" disappear. A may be necessary and sufficient for the occurrence of B within the field X, and yet not be necessary or sufficient for its occurrence within the field Y. And the fact that A cannot, as we say, make a Y become B, is nothing against its having that effect on an X and suggests no variability in the causation of B in the field X. Thus, what makes me angry may leave you quite indifferent, but this does not mean that there are not perfectly definite conditions of the occurrence of anger in me. Further, it does not mean that there are not definite conditions of the occurrence of anger in *men*; for what is necessary and sufficient for its occurrence in this wider field must be necessary and sufficient for its occurrence in me, and in you, as part of the field, but what is necessary and sufficient for its occurrence in me may not be necessary and sufficient for its occurrence in other men. We could inquire, again, into the conditions of its occurrence in the still wider field of *animals*. That is to say, we can have many different problems, but no one of them is definite, and only confusion can result, if we have not begun by specifying (a) the field, (b) the phenomenon which may or may not occur within the field (e.g., anger in me) and of whose occurrence we are seeking to determine the conditions.

The inquiry into causes, in fact, is only a special case (involving, as mentioned above, a time-factor) of the solution of problems in general. In trying to determine when a phenomenon is present, and when it is absent, in a given field, we are endeavouring to divide a *genus* (the field) into two species, one of which has a certain *property*, while the other has the opposite. We are asking what distinguishes the

cases in which a G is P from the cases in which a G is not P; that is, in terms of the doctrine of predicables, we are looking for a *difference* (or *differentia*) which will solve the problem posed by the variable property in the genus (e.g., by the appearance and non-appearance of anger among men). And we have solved it, or at least proposed a solution, when we say that (a) all G which are D are P, and (b) all G which are non-D are non-P—that is, that D is a necessary and sufficient condition of the occurrence of P in the field G. In other words, we have a problem when we know that a G may or may not be P, and we have a solution when we can use D as a criterion determining absolutely whether it is or not.

Now it is important to observe that “necessary and sufficient” is a symmetrical relation (if A is necessary and sufficient for B, B is necessary and sufficient for A), this arising from the fact that “necessary” and “sufficient” are converse relations (if A is necessary for B, B is sufficient for A, and *vice versa*); and the same applies to a necessary and sufficient condition within a field. For the two propositions, all G which are D are P and all G which are non-D are non-P, assure us that D, P and their opposites all occur in G, so that we are entitled to pass to the “virtual contrapositives”, all G which are non-P are non-D and all G which are P are D, where D appears as the property and P as the difference. This reversibility, of course, raises no logical difficulty, and the fact that either may be taken as a criterion of the other is met in practice by our selecting the more readily observable or controllable, granted that we already know the solution, and, prior to that, by our starting from a specific problem wherein something is taken as the property, and the difference is what we are looking for. It is, however, a point to be remembered in view of rationalist attempts to represent some properties or conditions as “more fundamental” than others.

In the theory of causality this rationalism takes the form of representing the cause as superior in reality or logical standing to the effect. But, when a cause is taken as a neces-

sary and sufficient precedent condition of the occurrence of a phenomenon (its "effect") in a certain field, then it follows that the effect is a necessary and sufficient *subsequent* condition of the occurrence (or operation) of the cause in the field. So that, granting the temporal priority of the cause, there is no question of any logical priority; and while, if our causal beliefs are true, we can with certainty, given the cause, infer that the effect will occur, we can with equal force infer, given the effect, that the cause has occurred. In this way, the cause is no more a "reason" for the effect than the effect is for the cause. But, before we can be satisfied with this solution, we have to consider a difficulty in the very conception of a "necessary and sufficient precedent condition", a difficulty which may appear to force us to recognise a difference in status between causes and effects.

This is that, if condition A exists for a time, however short, during which condition B does not exist (and, otherwise, A does not *precede* B—and, if both came into existence at the same time, there would be no reason for calling one cause and the other effect), then A is not sufficient for B; a lapse of time, at least, is also required. And this will appear all the more strikingly when it is observed that causing, conceived as above, must be a transitive relation (one such that if A has it to B and B to C, A has it to C), since both "necessity and sufficiency" and precedence are transitive relations; so that, if we find a number of terms in a causal series, the first can be said to *cause* the last, in exactly the same sense as the last but one does. The difficulty might be met by saying that the lapse of time should be included in the statement of the condition, that having been A for some time, or having been subject to A some time ago, should be taken as the occasion of an X's being B. Or, again, it may be said that, in using the very phrase "precedent condition" in this connection, we are signifying a condition of an X's *going to be* B, and that A may be sufficient for that, even if it is not at all times indicative of B's *presence* in the field X.



This brings us to an essential point of distinction between the consideration of causal relations and that of relations of properties; in the latter case, we are concerned with establishing conditions under which an X is B or under which it is not B, whereas in the former case our inquiry is into conditions under which an X *becomes* B. It is this that marks the distinction between the direct and the indirect method of difference, in Mill's theory—in the direct method (or, at least, in what Mill admits to be the principal type of its application) a factor is introduced and a certain change ensues; in the indirect method (also called the joint method of agreement and difference) we have only observation of the joint presence and joint absence of two properties, but no indication of the temporal priority of either to the other—if there were, that would involve the *entry* of a factor and the use of the direct method. It appears, then, that the indirect method, which, like the rest of Mill's methods, gives only verification and not proof, can at most verify a hypothesis of *difference*, i.e., of a criterion for distinguishing, within a genus, that species which has a certain property from that which has not. In the case of the direct method, on the other hand, the position is that a member of the genus (or part of the field) *acquires* a character which it previously had not; and it is this acquisition, or, more exactly, the thing's now having the character, that we speak of as an effect. For example, when something makes me blush, it is "my blushing now" that is said to be the effect of its operation, and not my transition from non-blushing to blushing, though it has to be understood that I was not blushing before.

Thus the effect, in ordinary usage, corresponds to the "formal cause" in the Aristotelian classification—at any rate, to the acquisition by the "material cause" (which, here, is the field or the relevant part of the field) of the form or character in question. And, "the matter having the form" being actually the effect, we are left with the "efficient cause" as the cause proper—which is still in accordance with ordinary usage.

From this point of view, the field is what is "acted upon", and the contention that a cause is a cause in a field amounts to the assertion that any "causal law" embodies the statement both of what acts and of what is acted upon, so that the fact that something acts differently on different things implies no "exception" to law or variation in it—nor does the fact that it may act differently on the same thing at different times, for this merely indicates that the thing acted on has changed in some respects, i.e., has ceased to be a member of a certain genus and become a member of another. Nevertheless, we see that the above way of speaking puts cause and effect in different positions, since the effect characterises some member of the genus, whereas the cause, if not necessarily outside the genus (since members of the same genus do interact), at least may be so and is certainly outside the member affected, though the two enter into the same situation.

Such a difference of relation to the field does not, of course, imply any difference in logical standing, any division of reality into agents and patients; whatever we call the cause and whatever we call the effect are alike situations, and any situation can have "efficacy" in that it can be the sufficient (as well as necessary) condition of another situation. Thus, when something makes me angry, my anger (the effect) may cause amusement in someone else. The difficulty which arises is not whether the same thing can be a cause and an effect, but whether it can be a cause and an effect within the same field. It has, in any case, to be emphasised, in the consideration of causality as a transitive relation, that the same field should be in question throughout—otherwise, the argument to prove that a cause of a cause of a thing is a cause of the thing itself has an ambiguous middle. But, if the effect is regarded as characterising a member of the genus (or field) and the cause is not, it would appear that this ambiguity is always present, that there is no such thing as a "causal chain" (or transitive causality). It is quite certain that this expression is often used very loosely of cases where neither necessity nor sufficiency carries over from one link to the next.

At the same time, we commonly recognise *stages* in the development of certain kinds of things, i.e., we find them to have a regular succession of properties. But we do not say, in such cases, that the earlier stages cause the later. And this is so not merely when, as in the case of the "chains" which are not really linked, it is possible to have the succession interfered with, e.g., in the "ages of man", where the prior stage of youth is necessary but not sufficient for the attainment of age. We still do not use the term "cause" even when we know that the later development is unavoidable; we know that whatever is alive is going to die, but we do not say that being alive is the cause of death. When, in fact, we proceed to give a causal account of the development of anything, it is by considering the interactions of the minor systems which it comprises—in addition, of course, to its interactions with other systems. If, therefore, we say that an effect is a property (or a thing's having a property) while a cause is not but is an outside thing (a thing situated in such-and-such a way towards the first thing), we are not raising any obstacles to investigation. On the contrary, we have the advantage, in regarding causation as external action, of rejecting any rationalist doctrine of development from internal resources or by "unfolding of potentialities"; and, in discarding "causal chains", we are recognising that there is no unilinear form of development but interaction at all points.

Further working out of the theory here outlined would undoubtedly lead on to fresh problems; the attempt to give a thorough treatment of any of the main questions of logic involves us sooner or later in the others. But it has at least been indicated how the theory of the "field", without departing violently from common conceptions, enables us to combine scientific rigour with recognition of the actual plurality of things. And it provides a solution of all those minor puzzles in which Mill, in his discussion of the subject, becomes entangled. In regard to the "invariable sequence" of day and



night, for example, Mill argues soundly enough that neither is an unconditional antecedent of the other; but, lacking the conception of the field, he is unable to clear up the question altogether. To make it more precise, we have to observe that the distinction, as regards any selected portion of the earth's surface, is between its being illuminated (by the sun) and its not being illuminated. Calling the region X and "being illuminated" B, we see that the assertion that night is the cause of day amounts to saying that X's not being B is the cause of its being B; in other words, the assertion is that a certain change's not having taken place is the cause of its taking place. Obviously, to become B, X must have been non-B, but this is not an account of the conditions of the change. To speak of sequence at all is to imply the occurrence of some change, and, if the passage from non-B to B were called an "invariable sequence", *every* sequence would be invariable. Once we have made our problem precise, however, there is no difficulty about the answer. Taking "regions of the earth's surface" as the field, we find that the cause of the acquisition of the illuminated character (and, similarly, of the unilluminated character) is the rotation of the earth in relation to the sun's rays; or, if we include the rotation in the specification of the field, we have simply the sun's rays as the cause. Any number of problems can be raised in regard to any natural phenomenon, but, once we have specified field and property, we know, at any rate, the *form* that an unambiguous answer will take, and we shall not be misled into taking the problem, or part of it, as its own solution.

It is, again, through failure to specify the field that Mill falls into confusion on the distinction between cause and conditions, and wishes to treat "the whole of the antecedents" as "the real cause". Thus, when people say that the eating of a certain dish was the cause of a person's death, Mill thinks they are leaving out of account such conditions as "a particular bodily constitution, a particular state of health, and perhaps even a certain state of the atmosphere" (l.c., ch. V,

§ 3); whereas it is obvious that some of these conditions should be taken not as part of the cause operating but as part of the field operated upon, since no one supposes that the eating of that dish is the cause of death in general. It is likewise failure to specify the problem, or confusion between different problems, that leads Mill into difficulties (l.c., ch. VI) regarding "exceptions" to the principle of Composition of Causes, according to which "the joint effect of causes is the sum of their separate effects". The real question is whether what has been taken to be the effect of a factor A occurs or not when a factor C is also operating—if it does not, then A is not sufficient for its supposed effect; if it does, the fact that C is also operating is beside the point. In the special case in which the causal hypotheses are stated in quantitative terms, the test of them is still whether the quantity specified *occurs or not* in the given instances. And, finally, the theory of "intermixture of effects" is open to similar objections to those which have already been urged against "plurality of causes".

Mill's main error, however, lies in the assumption, which he holds in common with other rationalists, that a situation or "phenomenon" can be analysed into a number of simple factors—that science, indeed, consists in the reduction of facts to their simple laws of connection. The recognition of the infinite complexity of things, on the other hand, leads us to see that there will be many different laws "governing" the same process, that everything goes on in various, though interrelated, ways. And just as, on this view, there will be many "differences", each solving the problem of a certain variation within a genus, so, even allowing for the distinction that has been drawn between the two cases, there will be many causes of the acquisition of a character by a certain sort of thing, since any situation which is said to have this effect will be a complex of interrelated ways of working. Since, in fact, to have a character is itself to have a complex way of working, there will be no line of demarcation between

the inquiry into differences and the inquiry into causes (and no distinction between classificatory and historical or developmental science), but the former will involve recognition of causal action within a thing (of the thing as a system), this being never unconnected with causal action without.

It will seem curious to some minds that one should say that there can be *many* necessary and sufficient conditions of any situation, since to say that something is sufficient is understood to mean that nothing else is necessary. But there is no real difficulty here. The recognition of equality of sides is sufficient to distinguish equilateral from other triangles, and yet the recognition of equality of angles is an equally sound basis of discrimination. That is to say, the *recognition* of equality of sides is not required for our distinguishing the species of triangles, but the species must *have* that difference even when we use another criterion. Difficulty arises only on the assumption of simple characters or factors, as when Mill speaks of "the only" difference between two sets of circumstances. But, as we have observed, any specific difference is itself complex, and the fact that there are many ways of specifying it (since it has many ways of working) does not involve it in ambiguity or lead to the denial of "invariability" in the form of universal truths. It is, of course, possible for us to make mistakes in regard to universal connections, just as in regard to particular "collocations"; but it is not possible for us to think at all without believing in some "laws". Errors can be corrected by the testing of beliefs, though even so it is by other beliefs that we test any given one. It is only the attempt to reduce them to "elements" or rest them on "ultimates" that makes error inevitable.

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# THE ENTRANCE EXAMINATION POLICY OF THE UNIVERSITY OF NEW ZEALAND.

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## II.

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By W. ANDERSON.

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Experience shows that innovating legislation is connected not so much with science as with the scientific air which certain subjects, not capable of scientific treatment, from time to time assume.—Maine.

The public be damned.—Vanderbilt.

I COME now to the application of the “scaling” system to “matriculation”, the examination for entrance simply. The method here has this in common with the case of the examination for scholarships, that the process depends upon the assumption that the “anomalies” found in the results are assigned wholly to fluctuations in the standards set by the examiners. Here, however, the upholders of the system point to additional anomalies as the outstanding ones in the case of this “non-competitive” examination.

First of all there is now introduced the further consideration of (1) variations in the award of marks in a single subject as between one year and another. The complaint is that candidates fail who would have passed “in another year” and (though this is not emphasized in public) candidates pass who would have failed “in other years”. We have seen that, under the system which was attacked, the examining goes by rotation among the four University centres, a system which in itself provides, of course, the possibility of a certain amount of fluctuation in personal examining standards. But

the "reformed" system assumes that this last is the cause of all fluctuations in the annual configurations of the marks awarded. These fluctuations are thus meet for extinction by a process of "scientific adjustment", a process quite external to the knowledge and judgment of the mere examiner. Such is the scope of the new system so far as presented to the public.

In addition, there are, however, at least two features of the examination returns under the "unreformed" system which are treated in practice as likewise anomalous and are administratively ironed out. They have never been mentioned in the material of the discussions leading up to the permissive legislation by the Senate. Their elimination, never authorised by the deliberative bodies of the University, constitutes in fact a typical piece of that bureaucratic audacity in the transgression of delegated powers that is such a marked feature of contemporary politics. These are (2) the prevalence, in the matriculation examination, from year to year, of marks higher as a whole in one subject than in another, and (3) the "abnormality" in the distribution of marks in a subject by the skewing of the curve; by the bunching of candidates at one end—in this case the lower end.

The elimination of these "anomalies", clandestine as it has been, and with no attempt at their prior control in the instructions issued to examiners, cuts at the root of the function of the University as the instrument of public control over the standard of work done in the schools.

The publicly alleged "anomalies", to take them first, are exhibited in a "Statistical Report", issued in 1930 by the University authorities, giving a tabular analysis of the results in the various subjects of the examination in the three successive years 1926 to 1928. These are presented in terms of:

- (a) a comparison, given in totals and percentages, of the number of candidates who obtained the minimum mark in each subject for a pass in the whole exam-

ination with the total number of candidates in each subject, in each of these years;

- (b) the average marks obtained, in each year, by the candidates in each subject;
- (c) a chart of the median and upper and lower quartiles of the marks obtained by the candidates in each subject.

I here select, as bearing on the present argument, certain salient features of these returns, confining consideration to the results under the heads of the five subjects taken by the most candidates, namely, English, Mathematics, Latin, French and History.

In the case of Tables A and B I give merely the direction of the variations from 1926; in the case of Table C, the actual figures.

TABLE A.

Subject.	Percentage of Candidates Obtaining Minimum.	
	1927 over 1926.	1928 over 1927.
English .. ..	Increase.	Decrease (less).
Mathematics .. ..	Increase.	Decrease (less).
Latin .. ..	Increase.	Decrease (less).
French .. ..	Increase.	Decrease (greater).
History .. ..	Increase.	Increase.

TABLE B.

Subject.	Average Mark of Total Candidates.		Average Mark of Candidates Obtaining Minimum.	
	1927 over 1926.	1928 over 1927.	1927 over 1926.	1928 over 1927.
English .. ..	Increase.	Decrease (greater).	Increase.	Decrease (greater).
Mathematics .. ..	Increase.	Decrease (greater).	Increase.	Decrease (greater).
Latin .. ..	Increase.	Decrease (less).	Increase.	Decrease (less).
French .. ..	Increase.	Decrease (greater).	Increase.	Decrease (greater).
History .. ..	Increase.	Increase.	Increase.	Increase.



TABLE C.

Subject.	Lower Quartile.			Median.			Upper Quartile.		
	1926	1927	1928	1926	1927	1928	1926	1927	1928
English .. ..	36.6	41.7	36.7	43.3	48.4	42.5	48.7	55.7	47.6
Mathematics .. ..	36.0	44.2	39.9	49.9	53.8	49.5	64.1	62.8	59.5
Latin .. ..	26.4	29.4	25.8	34.6	39.8	37.4	42.8	50.8	47.8
French .. ..	30.0	30.2	26.3	39.0	39.9	36.2	46.5	50.0	43.7
History .. ..	33.6	36.7	42.8	40.8	43.8	51.3	47.4	51.0	60.0

40 per cent., it will be remembered, is the required minimum in English, 30 per cent. in the other subjects.

It will be observed that the agreement of these several measures of the trend of the results, taking each subject by itself, is of course consistent with the supposition that the whole variation is attributable to the employment of a different examiner each year, though the case of History suggests that four years might have been a better range of study, as giving the round of the four colleges. On the other hand, the fact that in four out of the five principal subjects, different as they are, when compared with one another, the variation agrees in direction would suggest the influence of some other factor, for example, whatever it is that is commonly expressed by the difference between a "good year" and a "bad year", which is certainly not a proper subject for that "statistical" elimination which could rightly be applied to the proved vagaries of individual examiners.

From the data under return (a) it is also in point to extract the statistics of the total numbers of candidates sitting the examination. These are:

Subject.	Total Candidates.		
	1926.	1927.	1928.
English .. ..	3,694	3,830	4,118
Mathematics .. ..	3,477	3,544	3,814
Latin .. ..	1,790	1,720	1,804
French .. ..	3,835	3,598	3,847
History .. ..	3,172	3,207	3,479

This serves to bring out the fact that French is the subject generally chosen by candidates, and taught in the schools, as the compulsory foreign language. The importance of this fact is seen when it is taken in conjunction with the low figure at which the lower quartile value in French, as given in Table C, stands in comparison with English, Mathematics and History. Of this more anon.

These, then, are the data on which the adoption of the "scaling" process has been justified by its promoters. As expounded to and adopted by the legislative bodies of the University, the authorised procedure is that of bringing the configuration of the marks in each subject into conformity with a standard constituted by taking the average of a certain number of years in that subject. There is nothing here to say that the "standard" in one subject (as expressed in the range of the marks) is to be brought to equality with the "standard" (in this sense) prevailing in any other subject.

The "sources" for the arguments in justification of even the authorised programme are scattered through a variety of documents. There is a printed memorandum, published in 1927, addressed to the Senate and signed by Professor Shelley, bearing the sub-title "presented to the University Council [now Senate] dealing with Matriculation and embodying an analysis of a Preliminary Test given to candidates for Matriculation at certain schools in 1926 at the request of the Senate by a Joint Committee of members of the University and the Education Department". There are further, in order of appearance, a statement made to the Press by the Vice-Chancellor, Professor T. A. Hunter, of which I here follow the version published in the *Auckland Star* of 6th May, 1932, making a defence of the system against criticisms passed at a meeting of the Auckland Court of Convocation, and finally a typewritten Memorandum headed "Scaling", issued two years later by the University in explanation and defence of the system.

I have called certain statements to be found in these documents "arguments", but nothing at all is advanced in

proof of the assumption that all the variations from a constant annual range of marks are due to the subjectivity of the examiners. The closest approach to an argument occurs in the Memorandum signed by Professor Shelley, where two other conceivable factors are mentioned, only to be summarily dismissed. He says (p. 19):

At present this number [of candidates who pass] may fluctuate considerably from many chance causes. There are three main factors entering into the situation:\*

- (1) The standards of examination papers and of marking year by year,
- (2) the efficiency of the teaching, and
- (3) the level of mental capacity of the candidates.

Of these three factors number (3) varies so little from year to year, taking the whole country, that it would be impossible to measure the difference—that is, there would be the same percentage of children possessing a certain degree of mental capacity in 1927 as there will be in 1928. Factor number (2) varies almost as little year by year, and in any case it is possession of a certain degree of mental capacity that should determine entrance to the University rather than any slight difference in mental content due to teaching. So that for all intents and purposes we may regard these two factors as varying scarcely at all, but factor number (1) is capable of very great variation year by year, due [*sic!*] to change of examiners and other reasons seen above. And yet it is this most variable of factors which at the present time determines the number of passes. . . .

It is therefore suggested that the number of passes allowed shall be determined by taking a certain percentage of the 15-year-old population of the year next but one preceding the examination.

Here, then, is an arguable, if not an argued, position. As to the belief, here espoused by Professor Shelley, in the invariance of factor (3) I fear (after long experience) that it is impossible for those new educators and psychologists who make the assumptions upon which it rests, to realise that they are assumptions. Convinced *a priori* that there is such a thing as purely organic mental capacity, they claim that they have independent access to it, so that its own proper manifestations can be compared and contrasted with the effects of

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\* Is there not something amiss with the logic here? Professor Shelley says these three factors (at least) enter into the situation and then proceeds to say that two of the three don't enter into the situation.



learning. For any change in this situation we can only look to some future change of fashion in "psychology", by the time of whose arrival doubtless the present occupants of academic posts in psychology and education will be safely in receipt of their pensions. Here it will perhaps suffice to point out the absurdity of a contrast between "intelligence-tests" as measures of innate mental capacity with the ordinary examination as giving instead an estimate of knowledge or acquired "mental content".

The trouble lies in the profession, incumbent upon a naturalistic psychology, of ability to get behind the cognitive situation and appraise it from outside. An "intelligence-test" is still the investigation of what somebody knows about something. Any inference from the result of such an investigation to the "innate" or inherited qualities of organisms involves a theoretical construction of the phenomena on a basis of prior assumptions. Here, however, not only is this so, but the assumptions are of a philosophical nature. They cover a crucial change of category from knowledge, which is an act, to "intelligence" which is conceived as an attribute of a substance (an "organism" in this case) and to the degree of its presence in the given substance. When these assumptions are called, as they frequently are, "scientific", it must be remembered that "science" is here being used not in the sense of the intellectually satisfactory interpretation of appearances, but in the sense of materialistic philosophy. Could, indeed, the inevitable issue in scepticism of philosophic naturalism be more concisely demonstrated than in the pretence to criticise knowledge from a biological standpoint outside knowledge, of which we have an educational illustration in the scheme before us? Actually knowledge itself is inherently more intelligible than "intelligence" as a quality of organisms. The assumption that the distribution of "mental capacity", as a biological "character", in a population can be taken as "practically constant", and that isolable and measurable variations can be imposed upon it by isolable and measurable differences of "environment", "instruction", and the like, rests

itself on a huge "*obscurum per obscurius*".\* The only test of "mentality" is the testing of knowledge which takes place in that process of communication which is knowledge itself, and of which the current forms of examination, oral and written, operating as they do on the same level as that which they measure, are a necessary phase.

Next we are told that factor number (2), the efficiency of the teaching in the schools, varies about as little as does number (3). The systematic question-begging here will again be apparent, but now Professor Shelley informs us further that variations arising from this source ought not to count in any case, as it is "mental capacity", and not differences—"slight differences", he calls them—in mental content "due to teaching", that should determine entrance to the University. Surely someone has blundered! One can imagine a more or less reasonably critical version of pedagogical naturalism, according to which "innate" mentality of a certain calibre is indeed requisite for profitable study at a university, while yet it can only be made available for the purpose through development by means of schooling.

Such an upshot, however, is too tame for the exponents of the newer pedagogics; it would make the possible claims on behalf of "psychological" methods of examination much less revolutionary, and the allotment to their practitioners of positions of academic dictatorship too glaringly preposterous. Hence it has to be trumpeted abroad that "mental testing" offers a "scientific" substitute for the traditional scholastic preparation and diagnosis. "The tests aim at measuring general intelligence; the matriculation examiners are interested only in the amount of knowledge imbibed" (p. 10).

Can anybody deny that this is the language of the philosophy of "Back to Nature"? That those who hold such

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\* From this way of thinking emerges in turn the nonsensical "residual problem for further research" as to whether teaching can make some (small) addition to the innate (shouldn't this be connate?) mental powers, or whether it must leave them for ever unaffected. This is the kind of wild goose chase on which some "scientists" would like to see public money expended.

language, and speak of "slight differences due to teaching" are committed to the view that education is a mere physical "factor"? That the University should quite well operate upon bare "intelligence", and that the sole value of previous instruction in schools is its (limited and pre-scientific) diagnostic function, to be superseded at once when non-traditional (and non-traditionary) methods, of a scientifically psychological nature, take the field?

As the case for this scheme has been rested on an appeal to what we are supposed to know about the biological factor as governing the educational factor, it must now be pointed out that it involves, as stated, an uncritical treatment of the relation between capacity and its exercise, even as applied to living things as such. This is an extremely complex relationship. We have to distinguish under the head of potentiality between (1) that form of it which would consist in strictly hereditary qualities, the product of evolution, (2) the form which consists in the products of development or "maturation", and (3) that form which consists in the products of learning. But again the case is not that some acts of knowledge or behaviour, such as the solving of problems presented in "intelligence-tests", are the immediate outcome of hereditary elements; others the simple expression of the results of development (*e.g.*, the "phenomena of adolescence"), and others still the pure and simple application of what has been learnt from experience. Even from the naturalistic standpoint the position is that nothing is done which has not been learnt, though the ability to learn may be "based" on a fact of development, and the power so to develop may be in turn a constituent of the differential heredity of the individual or type. But further the difficulty of understanding or explaining a given act in terms of the structural quality of the particular agent is cumulative. It is a matter of some difficulty to account for what the agent does in terms of what he has learnt—such psychologists as Ward and Stout did not try to go beyond the terms of this problem; it is decidedly risky to venture an explanation of both of these facts together by

specific reference to what the individual has become through his organic development; while to try to go behind this again to an explanation of the whole in virtue of a specific hereditary capacity is to enter the region of the hopelessly impracticable. Nothing could be more precarious than inferences at so many removes from actuality.

Having thus realised the bogus character of Professor Shelley's claim to dismiss the possibility of any variation in the results as being attributable to the factor of efficiency in the work of the schools or the pupils, we may estimate at its true value the statement in the University's official defensive memorandum, "Scaling"—which I take next, reserving Professor Hunter's apologetics for later discussion—that the investigation covered in the Statistical Report from which I made extracts above "clearly showed" that the examiners' standards in the same subject in different years, and in different subjects in the same year, varied greatly. This application of scaling purports, in the words of the Memorandum, to make "adjustments" whereby "differences that arise not from the varying capacity of the candidates, but from the varying standpoints and standards of examiners, may be removed". But obviously before this could be done you would require to have some definite means of isolating the latter differences from the former. This the scaling system does not do, but merely makes the *a priori* assumption that differences of the former sort, as between one year and another, simply don't exist.

In this latest Memorandum there follows, however, a slight show of reasoning, where the argument from the effect of "large numbers" is introduced. To the above statement about the annual variation in the examiners' standards there are added the words "although, if there are sufficiently large numbers of candidates, the average calibre of the candidates must remain fairly constant".

But this, of course, is to state something that would itself have to be proved before the statement that the examiners' standards have varied could be admitted. (Incidentally it



could only be established through the holding of examinations, the very procedure that is under attack). What has in fact been done is to carry over the doctrine of the influence of large numbers from the fields in which it has been "verified" to a new field (that of acts) in which it has not, without making an independent study of the distinctive properties of the new field. Whereas it must be observed that the doctrine of the effect of large numbers has itself a purely statistical foundation, and thus contains in itself no warrant for its extension *a priori* to fields other than the particular ones in which it has been "verified". The scheme as presented suffers, then, from two fallacies of the first order.

I come now to Professor Hunter. His statement to the Press, after a repetition of the familiar question-begging remarks about an annual variation in the examiners' standards, contains certain points of further interest.

First he tells us that the system adopted was one that had been, in his own chosen language, "tried out" for a number of years by the [State] Department of Education. But how could it have been "tried out" in any sense of that transpontine phrase which should involve a testing of the validity of the procedure? All that is "tried out" there is the ability of the officials to perform the required arithmetical operations, an ability which may surely be "taken as read". Beyond this the process is a mere exercise of administrative authority, the possession of which by the bureaucracy is manifestly in no greater need of demonstration than is their natural desire to extend that power over the academic standards of the University. It is clear, however, that in the present administration of the University the State officials have found a "soft mark". The fabled Walls of Jericho simply aren't in it.

Follows this gem of advocacy:

It is admitted that the percentage of passes under this system was somewhat higher last year, but, following the general practice of the University on the introduction of an important change, the scale was applied rather more easily than more harshly. If the marks of the examiners had been interfered with more radically

by the scaling, not more but fewer candidates would have been passed.

This in defence of a system the one declared object of which is to introduce uniformity where diversity had prevailed before is rather cool. It suggests that in the future the statistical concertina may be squeezed in or pulled out pretty well *ad libitum*.

Finally we reach the *pièce de résistance*:

The extent to which the adjustment operated [in 1931] can be seen from the following analysis:

Number of separate examiners concerned .. .. .	58
Number of examiners whose marks were unchanged .. ..	31
Number of examiners whose marks were raised .. .. .	8
Number of examiners whose marks were lowered .. .. .	6
Number of examiners the spread of whose marks was increased	6
Number of examiners the spread of whose marks was decreased	7

And the Vice-Chancellor proceeds to give one instance to show, as he puts it, "how necessary" some adjustment is:

In one important subject there were four examiners, each marking over 1,000 papers. The papers were well mixed, so that the average calibre of the candidates was approximately the same in the four groups, and the examiners held a consultation before marking the papers. Yet the average marks awarded by two of the examiners were 42 and 41.5 respectively, and the average marks awarded by the other two were 29 and 28 respectively. If these marks had not been adjusted, many of the candidates who had been unfortunate enough to fall into the latter group would not only have failed in the subject concerned, but also for the whole examination.

But before we can tell what weight to attach to the figures for the examiners variously dealt with under the system, we must consider the Instructions issued to the examiners. Therein we read:

On the basis of the Statistician's investigation of the marks over a period of years it has been decided to adopt the following scale:

	For English, Home Science Arithmetic, and Special Mathematics.	For All Other Subjects.
Lower quartile ..	39	54
Median .. ..	49	45
Upper quartile ..	59	56
Quartile deviation ..	10	10

Then follows this extraordinary instruction:

Examiners are recommended to regard these as the normals to which the marks may fairly be expected to conform, provided that the number of candidates is not less than about 500. Care taken by the examiners to conform to this scale will save the University office much time and labour in making adjustments. Examiners should not force their marks into this scale and award pass marks to those not deemed worthy of a pass. Examiners need not adjust the marks of border-line cases, but should take great care to insure that their marks arrange the candidates in their order of merit.

Now can anybody explain how an examiner is to choose between complying with the second sentence in the above passage and complying with the third? Or what difference it can make whether he complies with the former or complies with the latter, other than that in the former case he scales and in the latter case the office will scale? Unfortunately, experience has shown that it makes a great deal of difference in practice. At least one examiner has already been removed from office on the pretext that his marks required scaling. This might seem a severe penalty for not "saving the University office much time and labour", particularly in view of the sentence which follows in the above-quoted "Instructions". But of course to grasp the true position here it is necessary to observe that distinction which I indicated above between the public, avowed objects of the scaling system and its unavowed objects, a matter we shall have to discuss in the sequel. We enter that atmosphere of pressure-politics, of government by barracking, in which "scientific" movements of this kind are commonly conceived.\*

It will be clear by now that the figures supplied by Professor Hunter giving the proportion of the examiners who in the year specified had been "scaled" mean nothing, in that no information is in the nature of the case available about how many more of them, following one part of the instructions, may have scaled their results themselves.

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\* In the constitution of the University of New Zealand you have an example of that system of government by the representation of specific interests which is surely the world's worst.

Similarly, the "glaring instance" of discrepancy in examiners' standards cited by Professor Hunter—two examiners returning a 40-odd average and two others on the same paper a 30-odd average—must be read in conjunction with the final sentence in the Instructions to Examiners quoted above, the one enjoining as of major importance the arrangement of the candidates "in their order of merit". In the light of subsequent events this sentence is equally ominous with the two which precede it. As put, it would suggest that the examiner has some miraculous means of placing the candidates accurately in order of merit irrespectively of his ability to assign them an absolute mark for each question. In view of the fact alone that in this examination the examiners do not know the candidates, this assumption may appear decidedly contrary to common sense. But worse is to follow. "Care to insure that their marks arrange the candidates in their order of merit" turns out to be a markedly ambiguous requirement. It may mean that the papers are to be conscientiously and impartially read and marked. But it may mean, it now appears, that differentiation is to be secured at all costs—that cases of equality in marks, or of a large more or less undifferentiated group at the bottom of the list, indicate a positive failure on the part of the examiner to exercise discrimination, exposing him to the risk of being branded with professional incompetence, or "unsuitability", as it is called. Here again, then, examiners are forced to make an extremely awkward choice between different readings of the "instructions".

So now we are in a better position to evaluate Professor Hunter's scare figures on the diversity of standards. A different reading of the instructions regarding the enforcement of the prescribed quartiles, added to a different reading of the instruction about securing an order of merit, is more than capable of accounting for a difference in the returns of a 40-odd average in one case and a 30-odd average in another. It is noteworthy, and typical, that Professor Hunter makes



no attempt at a diagnosis of the causes of this discrepancy. Nothing is said by him about which standard, if either, is right. Actually that is determined by the scholastic and departmental pressure-groups on the Senate and subsidiary bodies. We may note here the puerile but actually governing contention that has been officially advanced in connection with this very case, namely, that the scaling system is itself a test of whether an examiner's marks are correct or not. The view that prevails, then, is that the 40-odd average is to be "right" and the 30-odd average is to be "wrong".

This brings us to our consideration of the unavowed objects of the system of scaling as practised in the University of New Zealand. These can be sufficiently divined from what has turned out subsequently to be the official interpretation of the ambiguous "Instructions to Examiners", an interpretation, alas! which has been enforced retrospectively, with penalties for examiners who, not being "in the know", took the other reading. Briefly, then, the true import of the instructions is as follows:

- (a) Aim at a return of marks which shall conform to the quartile values specified.
- (b) (Don't indeed force your marks into such conformity, but) mark by such a method that your results can be mathematically transformed by us into a result in conformity with the quartile values specified.

This latter (b) gives the intended significance of the requirement that the candidates be arranged in order of merit.

But if you are really "in the know", these two precepts can be reduced to one:

- (c) Conduct your examination according to the method of the "New Examiner".

The point is that by setting the type of question paper, or by adopting the method of computing the marks assignable to answers to questions of the ordinary sort, that are characteristic of what is familiarly known (to the illiterate

and stupid) as the "objective" type of examination, it is most probable that your results will follow the "curve of normal distribution". Then of two things one. If your standard has been that actually attained in the schools, your quartile values will be those specified in the "Instructions to Examiners". If your standard has been "too" high (or "too" low) for the product of the schools, the fact that your results will still give a curve of normal distribution will enable the scaling process to transform them exactly into a schedule with the prescribed quartile values. In this way, and in this way alone, will the prescribed proportion of candidates be passed in each year.

The adoption of the principles of the "New Type Examination" is thus the king-pin of the structure. Without it scaling will simply not do what it has been claimed for it that it will do; it will not produce a uniform proportion of passes every year. The scaling in itself is powerless to produce a uniform result according to the determined quartile values where in the marks to be operated upon there is not a corresponding proportion of the candidates in each quarter—where, for instance, there is a largish little-differentiated mass near the bottom of the scale. This is what the New Examination eliminates, namely, that which is the normal result of ordinary methods of examination where the standard of preparation of the candidates is too low, and is the only way in which such a state of affairs can be brought to light and its proper penalty enforced. By the same token it is manifest that the objectives of the scheme are purely political; they have nothing to do with the maintenance of a uniform standard of educational qualifications, as was made the claim for the system in the expositions and defences addressed on its behalf to the mere public.

We have, then, under cover of a procedure held out to the Academic Board and to the public as simply one which will discount the effect of differences in standard between

the examinations of different years, or the different examiners in one year, in a given subject, a scheme which silently introduces two important principles entirely independent of this:

- (1) The systematic exclusion of any means for recording an actual difference in the standard attained by the candidates generally in one subject as compared with another, by the scaling of the marks awarded in such wise that the same quartile values shall be shown in every subject with the same pass-mark.
- (2) The enforcement of a particular method of examining; the so-called "new type" or "objective" examination.

While both of these steps involve a serious question of academic morality, not to speak of common honesty, the former is made explicit at least in the "Instructions to Examiners", where the same quartile values are, as we saw, laid down for observance in all the subjects other than English, "Home Science Arithmetic", and Special Mathematics. In this case our problem is simply that of how this provision got into the Instructions to Examiners. But the latter requirement is not explicit even in the Instructions to Examiners, and we have on our hands the further problem of the morality of the Senate's action in enforcing against examiners a responsibility which they did not know and were nowhere led to believe they were accepting.

(1) To deal with these two points in order, our selection above from Table C in the Statistical Report shows clearly the lower mark that constantly prevails at each of the quartile points in Latin and French than is the case with other subjects—a weakness, of course, which is conveniently "rationalised" in the familiar neo-pedagogical denunciations of the educational value of the study of languages. But it will be recalled that what was argued before the Academic Board and passed up with its blessing to the Senate, was the proposal that the marks in each subject should be scaled to a standard determined by the average of a certain group

of years, in that subject. Granted the validity of the arguments about examiners' fluctuating standards, this is all that is necessary to secure the uniformity then argued for. All that the academicians were led to understand they were committing, or recommending for commitment, to the "statistical experts" was the responsibility for carrying out the arithmetical transformations requisite to produce this result. The Senate accordingly proceeded to employ as its scaling officer an official of the State Education Department with special qualifications in mathematics.

In the outcome, however, we find a typical instance of modern bureaucratic presumption. It soon appeared that this individual interpreted his functions, or had been encouraged by the executive authorities of the University to interpret them, in a sense completely transcending the scope of merely mathematical qualifications or operations. For, as we see, when it came to the scaling of the marks in the linguistic subjects, the basis adopted was that not of the average for the selected groups of years in these subjects. Instead, it was brought up to that determined in the case of the other, non-language subjects. Thus we have in the case of French:

Lower quartile for the control group of years	..	27-28
Lower quartile adopted	.. .. .	36

The matter of the seat of responsibility for this action apart, I will leave to the judgment of my readers the question of its common honesty.

(2) Coming now to the issue of the clandestine use of the "scaling" resolutions to enforce upon examiners the adoption of a particular method of marking, whose effect, when added to the manœuvre described just above, is to rivet upon the University as its standard of entrance just whatever happens to be the standard reached in the schools, in whatever subject, I would point out firstly that the adoption of this method is nowhere expressly prescribed to examiners. In the "Instructions" the injunction of great care to ensure an arrangement in order of merit is accom-



panied by a statement that adjustment of border-line cases is unnecessary. I submit that the plain meaning of this is that, seeing that the results are liable to be scaled in respect of the standard of marking as a whole, the pass-mark to which the examiner is instructed to work is liable to be displaced, so that adjustments made by him at this particular point in his own schedule would throw the whole result out of gear, and would not in any case have the effect he intended. Thus an examiner is fully justified in proceeding on the basis that even if his results do not conform, or are not scaled by himself so as to conform, to the quartile values indicated, his discrepant standard can be discounted by the arithmetical scaling devices of the central authorities. If this is not enough, if the authorities require in addition to the scaling process itself something further in the way of a specific system of marking to be followed by examiners if scaling is actually to do what it was claimed it could, then obviously the onus is on the authorities to have clearly explained what cannot be put right by mere scaling, and to have specified the desired system of marking in their instructions to examiners. Why have they not done so? Because, I reply, it would have given the show away. It would have meant a public repudiation of the last pretence of maintaining an independent educational standard of entrance over against the schools.

But before it came to this, the promoters of the scheme thought of an alternative which might avoid publicity for their real aims. Concurrently with, or closely following upon, the adoption of the scaling system, the University superimposed upon it another "reform". In some of the larger subjects it had become necessary, instead of having the whole examination conducted by one professor with junior assistance, to employ one or more of his colleagues (each with assistance), but to make him according to his turn "chief examiner". By this procedure a certain amount of consultation over the examination and its standards between

professors on each occasion was made possible, with provision for a final decision. The "reform" in question, then, concerns the powers of the chief examiner. It is thus described in the official Memorandum "Scaling", already quoted, which was issued in defence of the practice:

To improve the scheme still further, the Senate has now adopted a modification of the present method, so that in future the chief examiner will be a supervising examiner, one of whose responsibilities will be to maintain a common standard in the subject and report on reasons for any variations that may be deemed prejudicial to groups of candidates.

Now to the uninitiated a "reform" of this kind, instead of being an amendment of a system of scaling, might well appear to be a direct alternative to and substitute for such a method. As a system of consultation and unified direction as among the examiners, it would seem to be based on the opposite principle to scaling. The latter looks for a norm in actual averages; the former seeks it in the establishment of a common understanding among those with authoritative knowledge of the subject—the only "objective" criterion, be it said, in the case. Would it not appear, indeed, that the two conceptions of a norm for intellectual performances involved, respectively, in the main system and in its amendment, being in principle as readily mixable as oil and water, are more likely than not to give divergent results in practice, and that the only possible outcome is a purely arbitrary political decision in favour of the one or the other?

The Memorandum leaves us in no doubt on this head. If the results obtained under the direction of the chief examiner don't produce the desired configuration, they will be scaled just the same as if they had been the returns of a single reader working on his own. Conformity to the predetermined scale is to be the sole and sufficient test of the efficacy of the "improved" system of consultation and unified direction. Is not Professor Hunter's prize exhibit of an anomalous result one in which there had been a consultation between the examiners before marking, and in which, therefore, consulta-

tion had "failed", showing the "necessity" of some adjustment?

In these circumstances the new "improvement" looks like nothing but an expensive farce. If the result wanted is known beforehand and can be, as the public has been all along assured, obtained by scaling the marks, why stick this fifth wheel on the coach? Yet it is evident that the authorities take the addition of this part of the system very seriously; so seriously that from the results of its working the Senate comes to decisions like the following, which I quote from the report of a meeting of the Senate:\*

That the following statement be sent to the Academic Board:

(1) The Senate is responsible for the appointment of University examiners.

(2) The function of the Academic Board is to recommend for approval the appointment of examiners by the Senate.

(3) In the opinion of the Senate the board is entitled to have reasons given to it for any action the Senate may take in declining to appoint an examiner recommended by the board.

(4) In the case under consideration the Senate informed the board that a particular person would not in future be accepted by it to act as examiner in French in the entrance examination.

(5) The facts which caused the Senate to take this action were the following: (a) That the examiner, owing to his avowed disapproval of the policy at present followed by the Senate in regard to the purposes and to the conduct of the entrance examination in French, *did in effect refuse* [italics mine—W.A.] to accept the conditions of examining required from him under that policy. (b) That, as a result of that refusal, his standard and method of marking differed materially from those of his co-examiners, entailing thereby the possibility of injustice to some candidates. (c) That remarking

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\* *New Zealand Herald*, 21.1.36. As Senate debates are not printed in the minutes of that body, I subjoin the following edifying passage from the same report:

"Mr. W. J. Morrell moved that clauses 4 and 5 be not published, and said it was obvious that publicity would be most unfitting and undesirable. Similar resolutions had been passed on previous occasions. There was no reason why 1 and 3 should not be published.

"Mr. von Haast said the policy of keeping these things dark was likely to give the public less confidence in the Senate. If they found an injustice had been done, the public would see that the Senate was making every attempt to remedy it. If they adopted Mr. Morrell's proposal, the public would think there was something suspicious about the proceedings."

Thank God for the Capitalist Press!

of his scripts by the chief examiner disclosed the fact that injustice had actually been done in some cases.

In civil life, of course, it would never be allowed that disapproval of the policy underlying legislation is a presumption of breach of the law, or of unwillingness to observe it; but apparently it's a way we have in the 'Varsity. From the present case it becomes clear that a defiance of the regulations is imputable:

(1) To an examiner who in returning his mark sheet expresses the opinion that the standard attained by those falling below the minimum mark (*i.e.*, not the pass-mark in the subject, but the minimum mark for a pass in the whole examination) is so low that it would in this case be wrong to secure them a pass by scaling. (There is nothing in the Instructions *as stated* to put such a request or expression of opinion out of order.)

(2) To an examiner who expresses the opinion that the standard implied by the values assigned in a suggested method of marking a particular paper by analysing its possible answers into a multiplicity of unit-"mistakes" is too low.

(3) To an examiner who professedly works on the assumption that "Matriculation" is of the standard of a university entrance examination as distinct from what may be believed to be the less rigorous standard desirable in a school leaving examination.

This even if these opinions are expressed openly to the University authorities, giving them the most direct opening for an explanation of the ways in which the policy of the University is incompatible with these opinions, and the University authorities have not done so.

By the same token it appears that a chief examiner is in danger of a charge of failure in the discharge of his duties who:

(1) Fails to enforce upon his colleagues in the case of (2) above not only the values assigned, but the method of marking.

(2) Or who thinks that a difference of opinion on the mere general standard of the examination as between a



“university entrance” view and a “school leaving certificate” view is a sufficient explanation of any variation between the returns of two examiners that he may have to report.

The one thing, then, that will harmonise the facts of the case and explain what is expected of the new system of chief examinership is that the real functions of the chief examiner are not what they seem to be. The sole object of the appointment of a chief examiner is to secure the adoption of a method of marking by all examiners that will produce the result that scaling has of itself failed to produce. This is the mysterious “policy” of the Senate. It is not avowed in the Instructions to Examiners. Such an avowal would at once vindicate the criticisms of those who have all along maintained that the purpose of the scaling system is to break down entrance standards, by leaving them to be determined completely by whatever happens to be the product of the schools.

It should not be matter for surprise that French should prove the storm-centre of this controversy in New Zealand. Given on the one hand the compulsion of a foreign language in the candidate's choice of subjects, and on the other the current belief in modernity, in learning and teaching those things only that may “prove of practical value in life” as contrasted with “dead languages”, together with the prevalent illusion that French is easy in comparison with Latin or Greek, we get the result that, as the figures showed us, the great majority of the candidates have compromised on French. But, partly as a result of these very factors, languages are the weakest side of the teaching in the schools, particularly in the rural “District High Schools” managed by the (State) Education Department. Especially nowadays when teachers have been, during and after their training, submitted to such great sophistic pressure in favour of diverting the instruction in schools to Economics, “Sociology”, Contemporary History and what not, under crude mechanical ideas of how to achieve “social control through education”,

there is not much encouragement for the undertaking of solid mental training.

But now the procedure adopted in the New Zealand system of scaling has the effect of perpetuating or intensifying, by concealing, the present low standard. It conceals it by the system of manipulating the marks, which creates an artificial and spurious equality of standard attained in all subjects alike. No matter how much worse the teaching may get as the years pass, it will be impossible to detect such a tendency.

As to the effect upon language papers of the "new type" examination method of computing marks, it is just here that it offers the greatest possibilities in the way of degrading the general standard of the examination. Its adoption is a legitimate ground for *bona fide* objection on that score alone, without any presumption of a sinister intention to wreck the scaling system dependent as it is on the use of this method of marking. For under this method it is the hardest thing in the world for any candidate to score *nil* on a question. In the case I now give by way of illustration, a question involving the translation of 17 lines of French into English carrying a maximum mark of 15, 50 "mistakes" must be made before the mark comes down to 0:

Errors.	Mark.
0 .. .. .	15
1-2 .. .. .	14
3-4 .. .. .	13
5-6 .. .. .	12
7-8 .. .. .	11
9-10 .. .. .	10
11-12 .. .. .	9
13-14 .. .. .	8
15-18 .. .. .	7
19-22 .. .. .	6
23-26 .. .. .	5
27-30 .. .. .	4
31-35 .. .. .	3
36-40 .. .. .	2
41-49 .. .. .	1
50 .. .. .	0

On ordinary "rational" methods of marking, certain answers will score, and deserve to score, nothing at all, whatever the possible points of mutual superiority or inferiority as between different answers on issues irrelevant to the individuality of the subject-matter. But on this method they can hardly help scoring something. As a crudely simplified illustration of what I mean, suppose a candidate to have given "cheval" as the French for "cow". As "French" this is just wrong. But to the extent that the word given is a substantive and not (say) a verb, it is "right". Therefore the answer, not being completely wrong, ought to get something. The proper examiner, then, will be the man who has so completely atomized the meaning of his questions that every item in it that is capable of an answer that is "true" or "false" by itself shall "count for one, and no one for more than one". Philosophers may say that such atoms of meaning are impossible, but your New Examiner has no time for philosophy; Logical Positivism is about his mark.

It may be agreed that the "new type" examination will tend to give a curve of "normal" distribution where the traditional examination will not. But it is not an examination in French, Latin, English *et cæteris*; it is an examination in some abstraction of "examinability". Indeed, the first consistent implication of the adoption of these methods would be the abolition of "subjects" altogether. If an examination in a language is to be an examination in that language, there is likely, especially if the school preparation has been inadequate, to be a bunch of more or less undifferentiated failures at the bottom of the list. Certain answers are just "not Latin" or "not French" and therefore worth nothing. A true examiner, not a "new" one, looks for knowledge in the sense implying relevant judgment and reasoning, not mere "right opinion". But the former are just what is uniquely tested in a language paper. What more exact definition could we have of the essential mental capacity than just the ability to present the content given in one individual symbolic

system in its equivalent in the terms of another symbolic system? Can it be denied that the study of a foreign language is one of the most important ~~ways~~ in which this ability is developed?

I suggest that we have here traced to its source the discrepancy between the returns respectively made by the two pairs of examiners quoted by Professor Hunter. The "new examination" procedure, of course, offers to university examiners a painless method of buying off the attacks of disgruntled headmasters, providing the academic dignitaries at the same time with a psycho-analytic "rationalization", in the shape of "keeping up with scientific progress", of their desertion in face of the enemy. But as to the question of which standard of the two is the true one, the onus of proof must rest on those who propose to test mind in the concrete, mind which just is the various subjects—French, Mathematics, and the rest—in their individuality and integration in an educated personality, by bringing it into comparison with an abstract hypothetical "mentality" in general.

The advocates of "new examining" try to make capital out of a contrast between the "objective" results to be had from the use of questions admitting of "yes-no" answers and the "subjective impressions" on which, they allege, the traditional examiner proceeds who deals in questions they are pleased to stigmatise as "of the essay type".

Now in the first place this clap-trap use of the words "objective" and "subjective" rests on nothing more than a failure to realise that objective means that in which competent authorities in any field find themselves constrained to agree; a failure traceable in turn to that superficial interpretation of experimental procedure, of "Science", which sees in experiment a ground for the belief that knowledge can be tested by something outside knowledge. The widely advertised cases of different independent readers being found to return widely different values to the same essay are no proof that authoritative judgments on such work are impossible. For



instance, we should need to know which, if any, of these readers set the subject of the essay, to what extent, if one did so, the others shared his interest in the subject, and, if they did not, what would have been the effect on the grading of the essayist if any one of these others had set a topic in which he himself was interested or on which he had special knowledge, and so on. Conversely, questions involving mere right opinion, the answers to which can be ticked off automatically, are of the lowest type of objectivity, falling rather below the distinction between subjective and objective altogether.

In the second place, it is urged that essay-writing is a highly skilled craft which youthful candidates cannot be expected to manage at all. But by now it is time to ask who began talking about essays in this connection. The fact is that the extremes of giving yes-no answers and mastery of the essay form are by no means exhaustive possibilities. What the new examiners ignore is that the basic mental function in the case is just that of answering a question, of which the two former are highly specialised forms. The process of giving a clear and intelligible answer to a question, giving an account of oneself on the point at issue, has no need of further definition, or limitation to terms of such specialities as these. The man who knows, knows when he is answered.

The case is, then, that even the avowed system of scaling in each subject to a basis of the average of certain past years must operate to conceal, once and for all, any actual changes, gradual it may be, in the standard of the school-teaching of the subjects concerned. It amounts to a deliberate abdication by the university of one of its principal responsibilities to the public, namely, that of a disinterested and impartial authority to safeguard those scholarly standards by which alone the efficiency of the schools of the country can be judged. Where bad methods of examining or teaching prevail, it can only serve to perpetuate them.

The scheme as we have analysed it combines all the disadvantages of the system of accrediting by the schools for entrance to the university with the absence of all its arguable advantages. Indeed, the hypocrisy of the scholastic attitude on this question of university entrance may be sufficiently judged from the fact that this scheme is that which has been promoted by the headmaster interest on the Senate and elsewhere. In the past these authorities have agitated for the adoption of the accrediting system, holding out to the university the prospect of riddance from the position created by their present lack of the power to prevent immature and unsuitable candidates from among their pupils from sitting for matriculation, thus inevitably depressing the standard of entrance. These same authorities are now found insisting upon a system under which the standard is set by nothing but the existing qualifications of those who come up for examination, and that whether they have even passed through a proper course of secondary schooling or not. In the scaling system there is, naturally, no provision for any sort of selection of the candidates by the schools.

As to the argument that the university entrance examination is *de facto* a school leaving examination and its standard should be squared with the fact, the answer is that this attitude, disingenuous as it is in itself, ignores the further consideration that the onus of proof is on those who maintain that there is any difference between the nature and standard of secondary schooling requisite as a preliminary to academic studies and those which are proper to the educational qualification desirable for business pursuits.

I may be asked if I make no allowance at all for the fallibility of examiners. Far from it; but the proper remedy is from within the examination system. One obvious cause, for instance, of differences in the range of marks prevailing in different subjects, say, as between the "mathematical" and the "literary" subjects, is the prevalence in the former of questions of the "problem-solving" type, where a whole parcel

of marks is won or lost according as the "right" solution is obtained or not. This, by the way, appears to be all that is meant when such subjects are described by the word "exact", and so far from its constituting a merit in an examination, it is arguable that it represents merely bad examining even in the "exact" subjects themselves. The remedy is not, however, merely to break up the "big" problems into a multitude of "smaller" problems. It seems rather to lie in the direction of introducing more "bookwork" in proportion to "problems". Here doubtless the boggy of "cramming" and "mere memorising" will be raised, but what examiner worth his salt will ever fail to detect the substitution of memorising from intelligent discussion in subjects of this kind? To listen to the New Educators one would think that it was a positive misfortune for man that he should have been endowed by the Creator with memory at all.

In any event, the solution of these difficulties can only come from mutual consultation and the arriving at a common understanding between those who know the subjects. Recourse to purely external and irrelevant methods like scaling undoubtedly saves the trouble of thinking; it absolves specialists, as they are called, from the labour of evolving a common philosophy—things, if we follow the fashionable "realism" and "positivism" of contemporary academic life, to be avoided like the plague. It provides the timid with an excuse for not standing up and fighting for the sacred cause committed to them; it is thoroughly well in line with the prevailing pacifist creed that opposition must never be crushed, must always be placated.

But the university, any more than other institutions, will never be saved by cowards and traitors. The transactions I have here examined amount, in my opinion, to a disgraceful surrender of a great public trust; the desertion by the university of a cause which it alone was able and interested to defend. The fault does not lie with the public, who would always support the University in any courageous attitude

it might adopt in face of scholastic clamour. Its misfortune is to be administered by those who have no belief that it should be master in its own house. Perhaps there are too many universities nowadays. It may be that people have been mistaken in thinking that with the multiplication of centres of university education a corresponding supply would automatically be disclosed of men spiritually qualified to fill academic offices. Sooner rather than later, too, it may come to be realised that the widely lamented application of physical discovery to the uses of war and destruction is far from constituting the real moral offence of "Science"; that the association of claims to have introduced "scientific method" as a new element into the administration of human and humane things with the appearance therein of ward politics, union racketeering and gangster rule is more than accidental. Policies such as we have examined are well calculated to make the names of scientific pedagogy and psychology to stink in the nostrils of decent men.

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## PERSONNEL WORK IN BRITAIN.<sup>1</sup>

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By C. R. BORLAND.

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OWING to the handicap of real knowledge of industrial conditions, practices and industrial relations in Australia, an overseas visitor can attempt no safe comparisons and may possibly all unwittingly dwell too long on aspects and problems which have little bearing on Australian conditions. It has therefore seemed that the most useful contribution would be to present some idea of the stage reached in thought and practice in personnel administration in Britain in the hope that a considerable amount of common ground may be found with Australian conditions.

With us, in a very special degree, our present stage of development is conditioned by the way in which the movement for the humanizing of industry began and developed. A very brief historical survey will therefore be appropriate. It takes us back to the Industrial Revolution and the revolt against its inhumanities. Led by Robert Owen in industry itself and by Shaftesbury in politics, it developed into the humanitarian movement and the great social reform movements of the Victorian and Edwardian periods. A number of enlightened employers, many of them Quakers, were then inspired by a great ideal of altruism and social betterment. They therefore sought to provide for their employees such conditions of life and work as should serve as a model for the building up of the new social order which occupied so many minds.

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<sup>1</sup> An address delivered under the auspices of the Chamber of Manufactures and the Aust. Institute of Ind. Psychology, in the Conference Hall, Chamber of Manufactures, April 4, 1938.

It was the experience of these pioneers and of those whom they had appointed under various names such as social secretaries, superintendents, welfare workers, to carry out their schemes that laid the foundation. The results of such experiments were drawn upon by Mr. Seeborn Rowntree, himself one of the pioneer employers, when he was called to the Ministry of Munitions during the war. For the sudden need for increasing and conserving the productive capacity of masses of totally unskilled female labour necessitated the improvizing of new methods of recruitment, training and supervision of large numbers of supervisors. It has been estimated that there were between 50 and 60 men and women doing this work at the outbreak of war in different parts of the country, so that, though the war experience influenced the development of the movement profoundly, it was not, as is sometimes supposed, the starting point. But the war did make welfare supervision compulsory in every controlled establishment employing women. Further, the need for an ever-increasing production from relatively unskilled and untried workers made all sorts of experiments on the health side not only advisable but imperative. Our knowledge of the effect of conditions of production and non-production, hours of labour, fatigue and its elimination, methods of rapid training, time and motion study and the value of co-operation with employees in various ways, advanced to a stage which might otherwise have taken a generation and more to reach. It had unfortunate effects in some ways, since hurriedly devised supervision was of necessity untrained and uneven. But it proved for all time the paramount importance of the human factor and its sympathetic management. The Report on the Health of Munition Workers issued immediately after the war was a landmark. And it is still the basis for succeeding health policies, health being conceived in the very widest sense.

In the period following the war there occurred many developments which profoundly influenced personnel policy. The results of experiments led to the issue by the Home Office

of a whole series of Welfare Orders widely extending the limits of the original Factory Acts. Two bodies were formed to continue and systematize the work which had been begun with such success. One was the Industrial Fatigue Research Board, later to be continued as the Industrial Health Research Board. This was a Government body. The second, following a little later, was the National Institute of Industrial Psychology, an independent body. The work of both these organizations was destined to revolutionize the whole industrial outlook on personnel questions. Methods of co-operation and consultation which had proven successful in dealing with labour were given a great impetus by the new sense of comradeship developed in our citizen armies. Co-operation was in the air. The Government became interested. It appointed a commission which produced the Whitley Report. This was followed by the establishment of Whitley Councils and Committees in many industries. Other experiments of the kind were made. Many of these were short-lived, but the greater number survived and are still functioning. The International Labour Office was instituted at Geneva to study world labour relations and the gradual development of ideas of scientific management. All these influences led to a new concentration on the *human factor* from many different but converging points of view.

The whole scope of what was still called Industrial Welfare was widened while, at the same time, it tended to become more technical and specialized. In the beginning it had been mainly concerned with the physical health and well-being of employees. Now it came to be extended to other aspects and conditions affecting personnel. Finally, it came to stand for the co-ordination of all the various factors included under management of personnel as distinct from the production or sales sides.

This centres around two problems, the supply of personnel and the conditions affecting personnel. Analysing these further, they may be grouped under six headings:

(a) *Employment* covers all the methods entailed in securing a willing and effective working force, recruitment,

selection, introduction, placing and follow-up of new employees, arrangement of transfers and promotions, interviewing leavers to ascertain their reasons, and the keeping of all relevant statistics of labour turnover upon which to base employment policies.

(b) *Health and Safety* implies the work of maintaining the establishment in such a condition that the health and physical integrity of the operatives are maintained and increased, the supervision of working conditions to maintain the best possible standards, determining physical and psychological standards required for different types of work, superintending physical examinations for juveniles and arranging re-examinations when required, supervision of arrangements for first aid and minor sicknesses, elimination of special physical and mental strains in industry, accident prevention and safety measures generally.

(c) *Education* involves all the training activities of the firm, whether conducted within the establishment or through outside agencies, training of supervisory staff, training of new employees first in regard to the specific job, such as apprenticeship training and traineeship, and secondly, outside the job to widen work or cultural interests, increase knowledge and train for responsibility.

(d) *Research* covers the collection and analysis of data which are essential as a basis on which to base decisions about terms and conditions of employment and works policies, results of any job analysis, any time or motion studies that may be carried out, any facts relating to the incidence of fatigue or training, the relative value of different wage systems, progress records, periodic labour audits, as well as the study of reports of current labour experiments likely to be of interest and reports of the National Institute of Industrial Psychology and Industrial Health Research Board, etc., so as to make use of these where they are possible and applicable.

(e) *Employees' Services* involve all the miscellaneous activities directed towards maintaining and strengthening morale and the creation of a community with mutual responsi-



bilities, pension schemes, sick funds, holiday funds, and savings schemes, canteens, recreational facilities and the like.

(f) *Co-operation and Consultation* bring in efforts by individual and joint conferences between workers and management. These may serve to settle terms of a labour contract, ventilate grievances and adjust difficulties which may arise as to interpretation and fulfilment and discuss and decide matters of common concern. All efforts which endeavour to maintain permanently a relationship between management and operatives, which is characterized by understanding, goodwill and freedom from friction, are thus covered.

We have now reached a point in our survey when the scope of the work has become more clearly defined and its claim to be a function of management is beginning to be recognized. The title of Welfare Work has ceased to be truly descriptive and is gradually passing out of use. It has been replaced by the terms Personnel Management, Labour Management, or, in the case of retail stores, Staff Management.

Before going on to the position as it stands today, there are two points which have emerged from this necessarily limited survey. The first is that it describes a natural process of evolution which is never at any stage imposed from without. The second is the fact that the movement started from altruistic motives seeking first the good of the employee and that it has been able to carry that emphasis right through the process of adoption into the structure of industrial management. This seems to distinguish the movement in Britain from some others, such as efficiency engineering, which have begun and developed definitely as part of scientific management. We trust that the former emphasis will always be maintained.

Today it is true to say that all really progressive firms do regard the care of personnel as an important function of management. Most firms have realized that, to keep abreast of modern scientific and mechanical progress and new demands on industry, planning in advance is highly necessary in departments concerned directly with production and distribution. They are prepared consequently to give much thought to com-

mercial policy, technical policy, sales policy and many other policies, but it is also true that too few directorates have yet taken the definite step of thinking out and adopting a constructive plan or policy in their dealings with their workers; yet the changes effected by the discoveries of science and mechanical progress are no greater, if as great, as the change in the mentality and outlook of the worker of today as a result of education and modern conditions of life. Neither the traditional attitudes nor the haphazard methods of the past can hope to be accepted in the changed and rapidly changing world in which we live.

Those who are concerned for the future, both far-seeing directors of industry and labour managers, feel that this constitutes a major and immediate problem. They look towards the realization by British industrialists of the need for thinking out a constructive policy for labour relations, which shall be in line with the legitimate needs both of management and operatives. It is to this end that we are working. It involves both acceptance of the principle and the attempt to reach common agreement as to what a sound constructive policy for labour should involve in practice.

The balance between the needs and demands of management on the one side and of operative staff on the other, would now seem to have reached this stage: management needs the best available operatives, men, women, boys and girls who are physically fitted, mentally equipped and temperamentally suited to the work they are to perform. It further requires that this staff shall be kept as efficient as possible, trained progressively both for work and responsibility and prepared to give intelligent and willing service at all times. Managements thus seek a staff, in brief, which is prepared to work not only *for* them, but *with* them. Labour, i.e., employees, require that they shall be regarded as human beings made up of body, mind and spirit and not as mere robots; that they shall have adequate remuneration; as great security of tenure as possible and reasonable opportunity for advancement as a reward for good service; real assurance of a fair deal and

justice at all times; some guarantee that their intelligence will be enlisted and respected in the arrangement of their work; and that reasonable explanations will be given to them either directly or through their representatives for new regulations and sudden changes of plan and of organization. Finally, workers are asking for an even greater share in responsibility and co-operation by seeking consultation in the determination of regulations and policies for serving their working lives. In short, they are asking for an environment in which they can fairly be expected to put forward their best efforts willingly.

A policy which will satisfy these demands, if one should carry it to its logical conclusion, implies a conception of industry as a partnership between management and operatives for a common purpose, involving the supply to the community of some product which it needs. An industrial organization thus becomes an enterprise in which the partners have mutual obligations and responsibilities, to which each has a distinctive contribution to make and in which the success of each is vitally concerned.

It implies also an attitude of mind in those responsible for its direction, which completely respects human personality and embodies this aspect in all its dealings. It is this conception of industry which lies behind all sound and fruitful personnel work.

Now it is not enough for a labour policy, however liberal it may be, to be formulated and promulgated by a board of directors. It has to be interpreted fairly and clearly to the employees. Its immediate interpreters are charge hands, foremen, forewomen and departmental managers. How many policies utterly fail because they are imperfectly understood or not accepted and administered by these various people! The paramount necessity to achieve success is the education of all grades of management so that they understand, accept and interpret policy aright.

This brings us to practical politics again. It would be no exaggeration to say that the problem which is most pressing at the present time is just this one of selection and training for executive and supervisory positions. How, in the

first place, is it possible to detect in your staff qualities of initiative and ability to deal with people; how may one keep an organization from becoming so mechanical as to stifle initiative and individuality, and how can such qualities when found be best developed? These are the things we are trying to discover.

A good deal is being done along different lines. Most universities are now instituting chairs or faculties of commerce. Courses in business administration and organization are being offered in technical schools and colleges. A new department of Business Administration has been created in the London School of Economics. On more practical lines the London County Council has, for the past two or three years, been co-operating with firms and labour managers in devising courses for foremen and forewomen, some of which have proved particularly fruitful, notably those in which scope has been given for discussion of actual day-to-day problems of foremanship. When a problem has been stated, possible solutions are discussed and criticized. Some interesting individual experiments have also been made. One is being carried out at present in Carlisle, by a group of women labour managers, who are doing progressive educational work with 90 to 100 forewomen from their seven various factories. They are working on a very broad basis covering a period of years. We feel that this experiment may have very interesting and far-reaching results.

We have many other problems arising partly out of the trend of our vital statistics. Out of the growing shortage of juvenile labour, restrictions in a choice of workers will in future necessitate much more careful scientific training of those we are able to employ. Possibly it may involve a readjustment of ideas as to what are juvenile jobs. The serious lack of skill and loss of skill due to restriction of apprenticeship in skilled trades and the effects of prolonged unemployment will also require consideration. All these points arise from a return to the problem of the training and retraining of employees. We thus seem to return to the



problem of training and the need more and more of help from the industrial psychologist, to enable us to tackle them successfully.

In an English paper, some weeks old, is a report of one of Mr. Chamberlain's speeches, one sentence of which seems relevant to our subject. This is what he says:

It is a relief to turn from the troubled vision of international affairs to the calmer atmosphere that we find in our own country. I wonder sometimes if in all our domestic history since the Industrial Revolution you could point to any period in which such an upward trend of trade and commerce as we have witnessed during the last few years has been unaccompanied by any major industrial dispute. Surely that is a very remarkable tribute to the good sense of our employers and workers, and I hope I am not too optimistic in believing that this freedom from industrial warfare is no accident. It arises, as it seems to me, from something in the nature of a permanent change in the methods of arriving at a fairer distribution of the profits of trade and industry. That, in turn, has sprung from a more complete and more scientific organisation of trade unions on the one side, and of employers' associations on the other, with the effect that we have largely cut out the old personal antagonisms, and that in these days we can approach negotiations between employers and employed on a broader and a more objective basis.

This same thought seems to have been suggested more than once lately. And practical signs of such a change have not, indeed, been wanting. For instance, agreements have been directly negotiated recently in Britain between firms employing large numbers of work people and the various trade unions concerned. Through these, considerable advances in standards have been made. I can think of two in particular: one negotiated by a large leading retail store, the other by one of our great industrial combines. In both cases the firms concerned have, over a period of years, been building up and practising a labour policy embodying some of the principles that we have been considering. This has arrived as a natural development and not as a result of pressure from without. It is never safe to count results, but if this thought of Mr. Chamberlain is true in any degree, very many causes must be behind it. Perhaps a certain measure of credit may justly be claimed by those who are working within industry itself for better human relationships.

## REVIEWS.

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A GENERAL SELECTION FROM THE WORKS OF SIGMUND FREUD.

Edited by John Rickman, M.D. The Hogarth Press and the Institute of Psycho-analysis. Psycho-analytic Epitome No. I. 1937. Pp. 329. Price: 5s.

The high price and general inaccessibility of Freudian literature, particularly in Australia, have always been an obstacle to the student, so that a warm welcome is certain for the new series of psycho-analytic epitomes, of which this selection from the works of Freud is the first. Certainly we can hardly recommend too highly this volume, which is a model of its kind. It is the more important in that it resolutely neglects the better known works like *The Interpretation of Dreams*, and *The Psycho-pathology of Everyday Life*, and concentrates upon those writings which deal with specifically psychological and philosophical issues. Within the compass of a single volume, it is possible to trace the development of Freud's psychology from the *General Ætiological Formula* of 1895 up to the *Inhibitions, Symptoms and Anxiety* of 1926. The editor's claim that "the evolution of Freud's thought is shown more clearly in this book than in any other" is no idle boast.

Considering the contents in more detail, we find included eight essays from the *Collected Papers*, including *The Two Principles in Mental Functioning* and *Instincts and their Vicissitudes*, three essays which have not previously been printed in book-form in English, and then the later works, *Beyond the Pleasure Principle*, *Group Psychology*, *The Ego and the Id* and *Inhibitions, Symptoms and Anxiety*. None of these is printed in full. Of the *Inhibitions*, there are selections only from the appendices, on account of the very complex and compressed nature of the book itself, but in most cases the major part of the argument is printed, omissions

being always clearly indicated. The reviewer compared in some detail *The Ego and the Id* with the selection (thirty pages) printed in the epitome, and confesses himself astonished at the degree of skill shown by Dr. Rickman as editor. It has to be remembered, of course, that there is a great deal of repetition as between different works by Freud, which can readily be omitted in a selection of this character because it is adequately covered in previous essays. The general method has been to omit case histories and illustrative material generally, clinical details and polemics. What is left, if it is severe and sometimes obscure reading, brings out clearly the philosophical and psychological implications of Freud's position through its very bareness, its complete lack of any anecdotal interest.

The editor apologises for the roughness caused by his omissions, but again one can only say that the editor's work in this regard is another testimony to his efficiency. Nor can one forbear mentioning the detailed index and glossary covering seventeen pages, which is almost a summary of Freud's position on any theoretical issue, and very much facilitates reference to the text.

J. A. PASSMORE.

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LOVE, HATE AND REPARATION. By Melanie Klein and Joan Riviere. London: The Hogarth Press. 1937. Pp. 119. Price: 3s. 6d. net.

It should be stated at the outset that only a practising psycho-analyst with extensive experience in the analysis of children would be competent to review this book. Anyone who has no patience with presumptuous incompetence should cease reading at this point.

The book is an attempt by two well-known analysts to tell us in plain language about the deeper mental processes which underlie the everyday actions and feelings of normal men and women. If you are interested in such important emotions as envy, greed, rivalry, hate and love, if you are

curious about infantile sexuality and the psychology of the Don Juan, if you wish to know the real origin of that fatuous grin which illumines the countenances of all fathers visiting all maternity hospitals, if you have any desire to learn why babies want to destroy their mothers, why some mothers cannot bring up their own children, why it is psychologically dangerous to bottle-feed your baby, why explorers rush off to darkest Africa, and why lots of Italians believe in Mussolini, in short, if you wish to know anything at all, you must read this book. But you must not expect too much. A small book which explains everything cannot be expected to contain proofs of the explanations. Of this limitation you receive fair warning in John Rickman's preface.

"The evidence for the conclusions is not given here; the book would be at least twenty times as large if it were. The long and painful struggle which the individual goes through during his attempt to deal with the unconscious processes in himself, the way in which he tries to push intolerable thoughts and impulses out of his consciousness, and, finally, his growing awareness that when these buried thoughts are brought to light they do explain things about himself which are otherwise inexplicable—all this material, which is available to the analyst, and which alone is convincing, has had to be left out."

It appears that most of the proofs have been established by Melanie Klein through her psycho-analysis of children. Or at least, they are being established. For, as Rickman also writes, "it is proper to say that these researches and the conclusions drawn from them are still undergoing the tests of criticism and further application". That is about the most proper sentence in the book.

The authors start out from certain psycho-analytical axioms. The baby's first object of love and hate is his mother. He loves his mother intensely for satisfying his hunger and for giving him that sensual pleasure in suckling which is, of course, the initial expression of the child's sexuality. But when the child's hunger is not immediately satisfied, he hates



his mother with an equal intensity, and is dominated by impulses to destroy her. Those primitive feelings, aggressive and loving, sexual and non-sexual, are the basis of all later-developed feelings. Out of the child's hatred of his mother develop all his later hates, envies, jealousies, rivalries and greeds, and their nature is largely determined by the nature of his primitive hate. And, on the other hand, out of the child's love of his mother develop all his later interests, loves, and pleasures, and their nature is equally determined by the nature of his primitive love.

Joan Riviere, in the first of the two long essays of which the book is composed, traces the developments arising from the primitive hate which the child feels for his mother when she fails to suckle him at the first onset of hunger. Perhaps you have forgotten the awful chaos into which your life was thrown when first your mother missed her tram and kept you waiting for a meal. It is proper to let Joan Riviere remind you.

"If he feels emptiness and loneliness, an automatic reaction sets in, which may soon become uncontrollable and overwhelming, an aggressive rage which brings pain and explosive, burning, suffocating, choking bodily sensations; and these in turn cause further feelings of lack, pain and apprehension. The baby cannot distinguish between 'me' and 'not-me'; his own sensations are his world, *the* world to him; so when he is cold, hungry or lonely there is no milk, no well-being or pleasure in the world—the valuable things of life have vanished. . . . The baby's world is out of control; a strike and an earthquake have happened in his world; and this is *because* he loves and desires, and such love may bring pain and devastation. Yet he cannot control or eradicate his desire or his hate, or his efforts to seize and obtain; and the whole crisis destroys his well-being."

The situation would be serious enough if that dreadful but temporary chaos were the only effect of a mother's belatedness. But there is worse to follow, for we read that "the hate and aggression, envy, jealousy and greed felt and

expressed by grown-up people are all derivatives, and usually extremely complicated derivatives, both of this primary experience and of the necessity to master it if we are to survive and secure any pleasure at all in life”.

It appears that almost all our later aggressive tendencies are simply projections. The real dangers threatening us are mainly within ourselves, in that primitive hate, in our own desires, in our own dependence. To admit this would be painful, so we project these inner dangers on to the outer world, and proceed to hate and attack them there. The greater part of Joan Riviere's essay is a series of illustrations of this projection.

Now I can and do believe that many of our dislikes are examples of projection. When the lunatic hears accusing voices, I can well believe that the voices are the indirect expression of his own repressed remorse. I am ready to admit my proneness to attack in others faults which I do not care to acknowledge in myself. It may even be that my hearty dislike for people who fail to arrive on time is a projection of the hatred I felt for my mother when she kept me waiting for my evening meal. But since I can think of simpler explanations, and Joan Riviere has no space for proofs, I propose to go on accepting my own simpler explanations.

You know very well that women are often envious of men, that there is a “masculine protest”. Bearing in mind the treatment that women have received, you think, perhaps, that you can understand the envy. But if you attribute women's envy to their obvious disadvantages, both social and economic, you have not begun to understand it. Miss Riviere has the real explanation. “Girls envy boys and men their penis and what they can do with it, directing their urine with it, or putting it into women and giving them babies, and so on.” Perhaps that is the reason, but again I know several others that seem likelier, and until Miss Riviere furnishes some proofs, I propose to go on believing in my own.

However, we do all know that many women envy men. The envy of boys and men for women is not so often realized.

When I ask women students how many of them wish they were men, there is always a considerable showing of hands. When men students are asked whether they wish they were girls, the response is invariably ribald laughter and other rude noises. According to Miss Riviere, that only goes to show that men have less understanding of themselves than women.

"Even yet it is often not realised how much boys envy girls, and especially envy women (their mothers) for their breasts and milk, and above all for the mysterious capacity women's bodies have of forming and creating babies out of food and what men give them. . . . Men's desire for female functions comes openly to expression in painters and writers, who feel they give birth to their works like a woman in labour after long pregnancy. All artists, in whatever medium, in fact work largely through the feminine side of their personalities; this is because works of art are essentially formed and created inside the mind of the maker, and are hardly at all dependent on external circumstances."

Perhaps you are a man and have painted a picture or written a poem, and perhaps Miss Riviere's account of the origin of your work in your envy of women seems to you a little unlikely. Her complete answer to your expression of doubt is that "except in men whose erotic life is consciously homosexual, this envy is, practically speaking, never recognised".

If I had to indicate the main implication of Miss Riviere's discussion of hate, I would say that it does not differ a great deal from the view expressed by T. P. Nunn in "Education: Its Data and First Principles".

"It is an ancient and profound truth that education should teach man to love and to hate the right things: but the aphorism must not lead us into the error of supposing that love and hate are of co-ordinate value. A love, since it urges one to explore and develop the riches of its object, is a principle of growth, of expansion; a hate, since its aim is to destroy relations with its object, is, so far, doomed to sterility. Hate is fruitful only when made to subserve a love, by

eliminating hindrances to its growth or purging it of elements that deface its nobility."

With such a conclusion we would all be happy to agree. Perhaps we should agree too with her psycho-analytical version of the poet's complaint that "the world is too much with us". Possibly because of our lack of concern with our inner mental world, too many of our hateful impulses are projected, directed outwards—hence the struggles between individuals, classes and peoples. Perhaps, with Miss Riviere, we may pin upon psycho-analysis our hopes of peace among men and emotional stability in individuals. She at least is confident that the self-knowledge to be derived from psycho-analysis will presently enable us to understand the aggressive, hateful impulses within us, to find for them a suitable outlet, and to use them in constructive ways.

Miss Riviere having dealt with hate, Miss Klein proceeds to analyse love. She presents very clearly love's development from the earliest sensual feelings centring round the mother's breast. The reader learns how the small girl's sexual interest shifts from her mother's nipple to her father's genital, how she daydreams of replacing her mother, marrying her father, and having babies of her own. He is reminded, too, of how the small boy "wishes to have his mother to himself the whole twenty-four hours of the day, to have sexual intercourse with her, to give her babies, to kill his father because he is jealous of him, to deprive his brothers and sisters of everything they have, and turned them out too if they get in his way".

Of course, the proofs are again missing, but you have seen them in other books on psycho-analysis, and have doubtless been convinced.

You may not have realized before all the complicated reasons why fathers visiting maternity hospitals wear that proud and happy look. If you share my simplicity, you thought it was because the wife has given birth to a baby, both are doing well, and the husband believes he is the baby's father. Those, my simple reader, are just the conscious



reasons, and quite the least important. It is the reasons of which the man knows nothing that make the grin so wide. One of them is that the husband has proved to his unconscious that he is as potent as the "old man" who thwarted so many childish wishes. Another is that he has at last satisfied his longing to make his mother pregnant, for, as every analyst knows, the man's wife is really his mother in disguise. A third unconscious reason is that the man has satisfied also his maternal wishes. As a small boy, you remember, he had strong desires to bear children, and now, without feeling guilty, he is able to identify himself with his wife in her bearing and suckling of their babe. It is safe to say that many men will be content to enjoy those particular experiences indirectly, through the medium of identification.

You will be interested to learn, too, how the early love of the breast dominates all interests in later life. The man who goes exploring in darkest Africa or wildest Borneo is really pursuing his babyish phantasies of exploring his mother's body. These same phantasies and desires explain the satisfaction of the astronomer who discovers a new planet. They explain also both literature and the appreciation of literature.

"To illustrate some of the processes I have just been discussing, I will take the well-known sonnet by Keats, 'On First Looking into Chapman's Homer'. Keats is speaking here from the point of view of one who enjoys a work of art. Poetry is compared to 'goodly states and kingdoms' and 'realms of gold'. He himself, on reading Chapman's Homer, is first the astronomer who watches the skies when 'a new planet swims into his ken'. But then Keats becomes the explorer who discovers 'with a wild surmise' a new land and sea. In Keats' perfect poem the world stands for art, and it is clear that to him scientific and artistic enjoyment and exploration are derived from the same source—from the love for the beautiful lands—the 'realms of gold'. The exploration of the unconscious mind (by the way, an unknown continent discovered by Freud) shows that, as I have pointed out before,

the beautiful lands stand for the loved mother, and the longing with which these lands are approached is derived from our longings for her. Going back to the sonnet, one may suggest—without any detailed analysis of it—that the ‘deep-browed Homer’ who rules over the land of poetry stands for the admired and powerful father whose examples the son (Keats) follows when he too enters the country of his desire (art, beauty, the world—ultimately his mother).”

I would go further than Miss Klein, and claim that, again without making any detailed analysis, indeed, especially without making a detailed analysis, one may suggest anything one jolly well likes, provided one has an audience sufficiently suggestible and credulous.

Of course, if I were a practising analyst, all Miss Klein’s contentions and suggestions would be crystal clear and obvious truth. As it is, Miss Klein seems to me a highly imaginative woman easily deceived by superficial analogies and much given to the fallacy of *post hoc ergo*. At this point the awful thought assails me that perhaps the whole essay is a gorgeous joke, and for two whole days of a well-earned vacation Melanie Klein has had me by the leg. If that is true, I can never forgive her.

C. R. McRAE.

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MEASURING INTELLIGENCE. A GUIDE TO THE ADMINISTRATION OF THE NEW REVISED STANFORD-BINET TESTS OF INTELLIGENCE. L. M. Terman and M. A. Merrill. George Harrap and Coy., London, 1937.

In 1916 the original Stanford revision of the original Binet tests were published under the name of Lewis N. Terman. Replacing the cruder version of Goddard, it soon became the standard clinical test measure in America and later in most English speaking countries. Attempts at revised Binet tests by others have faded into insignificance before the widespread application of the Stanford revision. Not a little of its popularity has come from the application of the



principle of the Intelligence Quotient borrowed from the German psychologist Stern. Today if most English speaking people speak of a Binet test the Stanford revision is implied.

Not the least factor in assisting in this popularisation of the tests has been the work of Terman himself and his assistants. By means of the tests potential geniuses have been caught young and given special class instruction. The follow-up of these "bright young things" through University courses has vindicated the principle of the constancy of the I.Q.

The year 1937 has brought a revision of the tests after a period of ten years' work by Professor Terman and his helpers. The new forms are styled "L" and "M" respectively and allow the use of alternative forms within a period of a few days of the original testing, with an increase of no more than three I.Q. points. In the 1916 single form type retesting was not advisable under the lapse of a period of six months. In the new forms the old break from ten to twelve year tests is now supplemented by an eleven year old test series. Another advantage lies in the lowest ranges of the Scale which cover tests for two years of age. In the lower ranges the inclusion of manipulation of actual objects ensures the interest of most young children. For this reason the new forms will be particularly welcomed in child guidance clinics.

Form L is closer to the original version; the alternative form M involves, on the other hand, many new types of tests. Most clinical workers will prefer to use form L for this reason.

There will be many who consider that the principle of Terman's Revision, in fact of the whole Binet test, that of a set of heterogeneous tasks designed to test capacity to solve problems, but picked according to the convenience of the inventors, is not a true test of intelligence. Yet, despite this scepticism, there will be few who will deny the practical advantages of the tests for an inclusive test of potential capacity for young children in clinical work.

The tests have been most carefully standardised on families of different levels of social status according to census proportions. Further, given proportions of country in relation to city children have been used in obtaining results. Calculations of the I.Q. for given chronological ages have been simplified in this revised edition by the inclusion of conversion tables.

The author insists on the administration of the tests *seriatim*, expressly objecting to the digit memory tests being given together, claiming that they should be administered as they occur in each age test group. At the same time, the "English Version" translates certain terms from American into English usage involving cents to pence, etc. Surely if the test usage must so narrowly follow the method set out by this new revision the English version which magnificently changes dollars to shillings and pounds without justification of standardisation in England is also unwarranted. But Homer nods and even the best psychologists slip occasionally, therefore let us be grateful rather than over-censorious. Most test workers, including the reviewer, will gratefully welcome and accept the new versions as a decided advance in the procedure of testing children.

A. H. MARTIN.